Canaveral Marshes Conservation Area Ten-Year Land Management Plan

St. Johns River Water Management District November 2015

LAND MANAGEMENT PLAN EXECUTIVE SUMMARY

Lead Agency: St. Johns River Water Management District (SJRWMD) Common Name of Property: Canaveral Marshes Conservation Area (CMCA) Location: Brevard County, Florida Acreage Total: 11,691 acres Acreage Breakdown:

Natural Community	Acres	Natural Community	Acres
Floodplain marsh	9,974	Mesic Flatwoods	88
Basin Marsh	550	Depression Marsh	2
Hydric Hammock	370	Improved Pasture	83
Prairie Hydric Hammock	192	Impoundment/Artificial Pond	25
Blackwater Stream	183	Canals/Ditches	21
River Floodplain Lake	175	Utility Corridor	26

Note: GIS-calculated acreage for natural community coverage varies slightly from actual total acreage.

Lease/Management Agreement No.: Managed as co-owner (Addendum A).

Use:	Single	Management Responsibilities:		
	Multiple_X_	Agency H	<u>Responsibilities</u>	
		SJRWMD	Lead Manager	
		DEP/Trustees	s Co-owner	
		FWC	Law enforcement	

Designated Land Use: Conservation

Sublease(s): None

Encumbrances: Cattle grazing lease (3) and utility easement (2)

Type Acquisition: Transfer, Ad Valorem, Save Our Rivers, and Mitigation Donation

Unique Features: Over 12 miles of St. Johns River frontage. Natural communities include

floodplain marsh, hydric hammock, basin marsh, and prairie hydric hammock.

Archaeological/Historical: Prehistoric middens, prehistoric canoe, and historic canal Management Needs: Habitat restoration and improvement, and exotic and invasive species management.

Acquisition Needs/Acreage: None

Surplus Lands/Acreage: None

Public Involvement: Management Advisory Group meeting and Public Hearing.

DO NOT WRITE BELOW THIS LINE (FOR DIVISION OF STATE LANDS USE ONLY)

ARC Approval Date:	BTIITF Approval Date:
Comments:	

Land Management Plan Compliance Checklist

Section A. Acquisition mormation items			
ltem #	Requirement	Statute/Rule	Page Numbers and/or Appendix
1.	The common name of the property.	18-2.018 & 18-2.021	ii
2.	The land acquisition program, if any, under which the property was acquired.	18-2.018 & 18-2.021	1-2
3.	Degree of title interest held by the Board, including reservations and encumbrances such as leases.	18-2.021	2
4.	The legal description and acreage of the property.	18-2.018 & 18-2.021	ii, Add. G
5.	A map showing the approximate location and boundaries of the property, and the location of any structures or improvements to the property.	18-2.018 & 18-2.021	4-6, 24
6.	An assessment as to whether the property, or any portion, should be declared surplus. <i>Provide Information regarding</i> assessment and analysis <i>in the plan, and provide</i> corresponding map .	18-2.021	18
7.	Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property. <i>Please clearly indicate parcels on a map.</i>	18-2.021	27
8.	Identification of adjacent land uses that conflict with the planned use of the property, if any.	18-2.021	3 <i>,</i> Add. E
9.	A statement of the purpose for which the lands were acquired, the projected use or uses as defined in 253.034 and the statutory authority for such use or uses.	259.032(10)	18
10.	Proximity of property to other significant State, local or federal land or water resources.	18-2.021	3, 6

Section A: Acquisition Information Items

Section B: Use Items

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
11.	The designated single use or multiple use management for the property, including use by other managing entities.	18-2.018 & 18-2.021	ii, 18
12.	A description of past and existing uses, including any unauthorized uses of the property.	18-2.018 & 18-2.021	18
13.	A description of alternative or multiple uses of the property considered by the lessee and a statement detailing why such uses were not adopted.	18-2.018	18, 32
14.	A description of the management responsibilities of each entity involved in the property's management and how such responsibilities will be coordinated.	18-2.018	27
15.	Include a provision that requires that the managing agency consult with the Division of Historical Resources, Department of State before taking actions that may adversely affect archeological or historical resources.	18-2.021	26
16.	Analysis/description of other managing agencies and private land managers, if any, which could facilitate the restoration or management of the land.	18-2.021	32-33
17.	A determination of the public uses and public access that would be consistent with the purposes for which the lands were acquired.	259.032(10)	18
18.	A finding regarding whether each planned use complies with the 1981 State Lands Management Plan, particularly whether such uses represent "balanced public utilization," specific agency statutory authority and any other legislative or executive directives that constrain the use of such property.	18-2.021	34
19.	Letter of compliance from the local government stating that the LMP is in compliance with the Local Government Comprehensive Plan.	BOT requirement	Add. F

20.	An assessment of the impact of planned uses on the renewable and non- renewable resources of the property, including soil and water resources, and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to compensate/mitigate damage caused by such uses, including a description of how the manager plans to control and prevent soil erosion and soil or water contamination.	18-2.018 & 18-2.021	19, 28-32
21.	*For managed areas larger than 1,000 acres, an analysis of the multiple- use potential of the property which shall include the potential of the property to generate revenues to enhance the management of the property provided that no lease, easement, or license for such revenue- generating use shall be entered into if the granting of such lease, easement or license would adversely affect the tax exemption of the interest on any revenue bonds issued to fund the acquisition of the affected lands from gross income for federal income tax purposes, pursuant to Internal Revenue Service regulations.	18-2.021 & 253.036	26
22.	If the lead managing agency determines that timber resource management is not in conflict with the primary management objectives of the managed area, a component or section, prepared by a qualified professional forester, that assesses the feasibility of managing timber resources pursuant to section 253.036, F.S.	18-021	26
23.	A statement regarding incompatible use in reference to Ch. 253.034(10).	253.034(10)	18

*The following taken from 253.034(10) is not a land management plan requirement; however, it should be considered when developing a land management plan: The following additional uses of conservation lands acquired pursuant to the Florida Forever program and other state-funded conservation land purchase programs shall be authorized, upon a finding by the Board of Trustees, if they meet the criteria specified in paragraphs (a)-(e): water resource development projects, water supply development projects, storm-water management projects, linear facilities and sustainable agriculture and forestry. Such additional uses are authorized where: (a) Not inconsistent with the management plan for such lands; (b) Compatible with the natural ecosystem and resource values of such lands; (c) The proposed use is appropriately located on such lands and where due consideration is given to the use of other available lands; (d) The using entity reasonably compensates the titleholder for such use based upon an appropriate measure of value; and (e) The use is consistent with the public interest.

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
24.	A statement concerning the extent of public involvement and local government participation in the development of the plan, if any.	18-2.021	ii, 3, Add. B & H
25.	The management prospectus required pursuant to paragraph (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	259.032(10)	18
26.	LMPs and LMP updates for parcels over 160 acres shall be developed with input from an advisory group who must conduct at least one public hearing within the county in which the parcel or project is located. <i>Include</i> <i>the advisory group members and their affiliations, as well as the date and</i> <i>location of the advisory group meeting.</i>	259.032(10)	3, Add. B
27.	Summary of comments and concerns expressed by the advisory group for parcels over 160 acres	18-2.021	Add. B
28.	During plan development, at least one public hearing shall be held in each affected county. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing. <i>Include a copy of each County's advertisements and announcements (meeting minutes will suffice to indicate an announcement) in the management plan.</i>	253.034(5) & 259.032(10)	3, Add. H
29.	The manager shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. <i>Include manager's replies to the team's findings and recommendations.</i>	259.036	19
30.	Summary of comments and concerns expressed by the management review team, if required by Section 259.036, F.S.	18-2.021	19
31.	If manager is not in agreement with the management review team's findings and recommendations in finalizing the required 10-year update of its management plan, the managing agency should explain why they disagree with the findings or recommendations.	259.036	19

Section C: Public Involvement Items

Section D: Natural Resources			
ltem #	Requirement	Statute/Rule	Page Numbers and/or Appendix
32.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding soil types. Use brief descriptions and include USDA maps when available.	18-2.021	11, Add. C
33.	Insert FNAI based natural community maps when available.	ARC consensus	10
34.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding outstanding native landscapes containing relatively unaltered flora, fauna and geological conditions.	18-2.021	17
35.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding unique natural features and/or resources including but not limited to virgin timber stands, scenic vistas, natural rivers and streams, coral reefs, natural springs, caverns and large sinkholes.	18-2.018 & 18-2.021	11-17
36.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding beaches and dunes.	18-2.021	17
37.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding mineral resources, such as oil, gas and phosphate, etc.	18-2.018 & 18-2.021	11
38.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding fish and wildlife, both game and non-game, and their habitat.	18-2.018 & 18-2.021	11-16, 28, Add. D
39.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding State and Federally listed endangered or threatened species and their habitat.	18-2.021	11-16, 21, 28, Add. D
40.	The identification or resources on the property that are listed in the Natural Areas Inventory. <i>Include letter from FNAI or consultant where appropriate.</i>	18-2.021	11-16, 28, Add. D
41.	Specific description of how the managing agency plans to identify, locate, protect and preserve or otherwise use fragile, nonrenewable natural and cultural resources.	259.032(10)	19-21, 26-27
42.	Habitat Restoration and Improvement		
42-A.	Describe management needs, problems and a desired outcome and the key management activities necessary to achieve the enhancement, protection and preservation of restored habitats and enhance the natural, historical and archeological resources and their values for which the lands were acquired.		19-21, 26-27
42-B.	Provide a detailed description of both short (2-year planning period) and long-term (10-year planning period) management goals, and a priority schedule based on the purposes for which the lands were acquired and include a timeline for completion.	259.032(10) & 253.034(5) ↓	27-32
42-C.	The associated measurable objectives to achieve the goals.		27-32
42-D.	The related activities that are to be performed to meet the land management objectives and their associated measures. Include fire management plans - they can be in plan body or an appendix.		27-32
42-E.	A detailed expense and manpower budget in order to provide a management tool that facilitates development of performance measures, including recommendations for cost-effective methods of accomplishing those activities.		31-32
43.	***Quantitative data description of the land regarding an inventory of forest and other natural resources and associated acreage. See footnote.	253.034(5)	11-18
44.	Sustainable Forest Management, including implementation of prescribed fire management		
44-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	18-2.021, 253.034(5) & 259.032(10) ↓	27-32
44-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		28
44-C.	Measurable objectives (see requirement for #42-C).		28

44-D.	Related activities (see requirement for #42-D).		23, Add. E
44-E.	Budgets (see requirement for #42-E).		31
45	Imperiled species, habitat maintenance,		
	enhancement, restoration or population restoration		
45-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		27-32
45-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5) ↓	28
45-C.	Measurable objectives (see requirement for #42-C).		28
45-D.	Related activities (see requirement for #42-D).		15-16, 21
45-E.	Budgets (see requirement for #42-E).		31
46.	***Quantitative data description of the land regarding an inventory of exotic and invasive plants and associated acreage. See footnote.	253.034(5)	11-18
47.	Place the Arthropod Control Plan in an appendix. If one does not exist, provide a statement as to what arrangement exists between the local mosquito control district and the management unit.	BOT requirement via lease language	27
48.	Exotic and invasive species maintenance and control		
48-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		21
48-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	31
48-C.	Measurable objectives (see requirement for #42-C).	¥	29
48-D.	Related activities (see requirement for #42-D).		Add. D
48-E.	Budgets (see requirement for #42-E).		31

Section E: Water Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
49.	A statement as to whether the property is within and/or adjacent to an aquatic preserve or a designated area of critical state concern or an area under study for such designation. <i>If yes, provide a list of the appropriate managing agencies that have been notified of the proposed plan.</i>	18-2.018 & 18-2.021	3
50.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding water resources, including water classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Water under Rule 62-302.700, F.A.C.	18-2.021	17
51.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding swamps, marshes and other wetlands.	18-2.021	11-15, 22
52.	***Quantitative description of the land regarding an inventory of hydrological features and associated acreage. <i>See footnote.</i>	253.034(5)	17, 29
53.	Hydrological Preservation and Restoration		
53-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		17-29
53-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	29
53-C.	Measurable objectives (see requirement for #42-C).	¥	29
53-D.	Related activities (see requirement for #42-D).		17, 26, 28
53-E.	Budgets (see requirement for #42-E).		31

	Section F: Historical, Archeological and Cultural Resources23, Add. E		
ltem #	Requirement	Statute/Rule	Page Numbers and/or Appendix
54.	**Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding archeological and historical resources. <i>Include maps of all cultural</i> <i>resources except Native American sites, unless such sites are major points</i> <i>of interest that are open to public visitation.</i>	18-2.018, 18-2.021 & per DHR's request	17, 26, 72
55.	***Quantitative data description of the land regarding an inventory of significant land, cultural or historical features and associated acreage.	253.034(5)	17, 26
56.	A description of actions the agency plans to take to locate and identify unknown resources such as surveys of unknown archeological and historical resources.	18-2.021	17, 26
57.	Cultural and Historical Resources		
57-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		17, 26
57-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	29-30
57-C.	Measurable objectives (see requirement for #42-C).	~	29-30
57-D.	Related activities (see requirement for #42-D).		70-72
57-E.	Budgets (see requirement for #42-E).		32

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**While maps of Native American sites should not be included in the body of the management plan, the DSL urges each managing agency to provide such information to the Division of Historical Resources for inclusion in their proprietary database. This information should be available for access to new managers to assist them in developing, implementing and coordinating their management activities.

	Section G: Facilities (Infrastructure, Access, Recreation)		
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
58.	***Quantitative data description of the land regarding an inventory of infrastructure and associated acreage. <i>See footnote</i> .	253.034(5)	17,26
59.	Capital Facilities and Infrastructure	259.032(10) & 253.034(5) ↓	
59-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		29
59-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		29
59-C.	Measurable objectives (see requirement for #42-C).		29
59-D.	Related activities (see requirement for #42-D).		24
59-E.	Budgets (see requirement for #42-E).		31-32
60.	*** Quantitative data description of the land regarding an inventory of recreational facilities and associated acreage.	253.034(5)	24
61.	Public Access and Recreational Opportunities		
61-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		24-26
61-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5) ↓	28
61-C.	Measurable objectives (see requirement for #42-C).		28
61-D.	Related activities (see requirement for #42-D).		24
61-E.	Budgets (see requirement for #42-E).		31-32

Section H: Other/ Managing Agency Tools			
ltem #	Requirement	Statute/Rule	Page Numbers and/or Appendix
62.	Place this LMP Compliance Checklist at the front of the plan.	ARC and managing agency consensus	iii
63. Place the Executive Summary at the front of the LMP. Include a physical description of the land. ARC and 253.034(5)		ii	
64.	64.If this LMP is a 10-year update, note the accomplishments since the drafting of the last LMP set forth in an organized (categories or bullets) format.ARC consensus		33
65. Key management activities necessary to achieve the desired outcomes regarding other appropriate resource management. 259.032(10)		27-32	
66.	Summary budget for the scheduled land management activities of the LMP including any potential fees anticipated from public or private entities for projects to offset adverse impacts to imperiled species or such habitat, which fees shall be used to restore, manage, enhance, repopulate, or acquire imperiled species habitat for lands that have or are anticipated to have imperiled species or such habitat onsite. The summary budget shall be prepared in such a manner that it facilitates computing an aggregate of land management costs for all state-managed lands using the categories described in s. 259.037(3) which are resource management, administration, support, capital improvements, recreation visitor services, law enforcement activities.	253.034(5)	31-32
67.	Cost estimate for conducting other management activities which would enhance the natural resource value or public recreation value for which the lands were acquired, include recommendations for cost-effective methods in accomplishing those activities.	259.032(10)	31-32
68.	A statement of gross income generated, net income and expenses.	18-2.018	35

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*** = The referenced inventories shall be of such detail that objective measures and benchmarks can be established for each tract of land and monitored during the lifetime of the plan. All quantitative data collected shall be aggregated, standardized, collected, and presented in an electronic format to allow for uniform management reporting and analysis. The information collected by the DEP pursuant to s. 253.0325(2) shall be available to the land manager and his or her assignee.

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1. Introduction & General Information

Canaveral Marshes Conservation Area (CMCA) is located along the St. Johns River for more than 12 miles (from S.R. 50 south to C.R. 520) and provides excellent examples of expansive floodplain marsh with long-range vistas (Figures 1a & 1b). This natural area provides important habitat for a diverse assemblage of plant and animals.

Recreational opportunities include boating, paddling, hiking, fishing, bicycling, and wildlife viewing. There are numerous, commercial, airboat tours that utilize the St. Johns River in and around CMCA.

The CMCA is managed by the St. Johns River Water Management District (SJRWMD) for the conservation and protection of natural and cultural resources and nature-based public outdoor recreation. A wide range of resource management actions are conducted on CMCA each year including prescribed burning, habitat restoration and improvement, exotic invasive species maintenance and control, and cultural resources monitoring and protection.

This document provides guidelines for land management activities to be implemented at CMCA over the next ten years. This is a revision of the land management plan approved in 2004 by the Governing Board of the St. Johns River Water Management District (SJRWMD).

1.1 Location

CMCA is located in northern Brevard County, south of S.R. 50 and north of C.R. 520 on the east side of the St. Johns River (Figure 2). CMCA comprises multiple sections in Township 23 & 34 South, Range 34 East and multiple sections in Township 24 South, Range 35 East. CMCA is located approximately ten miles southwest of Titusville.

1.2 Acquisition

The 11,691-acre CMCA is comprised of a transfer parcel from the Central and Southern Flood Control District, the Canaveral Industrial Park property, the Fisch Property, the Audubon Society property, and seven mitigation-donation parcels (Figure 3).

Following is a list of the acquisitions:

<u>Transfer Lands:</u> In 1977 the SJRWMD purchased approximately 37,377 acres from the Central and Southern Flood Control District for a price of \$3,293,371 using ad valorem funds. A portion of these acres were added to the Tosohatchee State Reserve (TSR) and managed by the Department of Environmental Protection, Division of Recreation and Parks, until 2003. In 2003, 4,551 acres of the original 37,377 acres located east of the St. Johns River were removed from TSR and added to Canaveral Marshes Conservation Area to be managed by the SJRWMD. The balance of the 37,377 acres is now part of River Lakes Conservation Area and Three Forks Conservation Area.

<u>Canaveral Industrial Park:</u> In 1986, the SJRWMD and the Board of Trustees of the Internal Improvement Trust Fund jointly purchased the 2,349 acre Canaveral Industrial Park located on the east side of the St. Johns River, east of Tosohatchee Wildlife Management Area. The SJRWMD purchased a 50% undivided interest in the property for \$839,736.21 using ad valorem funding. The property was originally managed as part of Tosohatchee State Reserve. In 2003, due to the property's proximity to Canaveral Marshes Conservation Area, the SJRWMD became the lead manager.

<u>Fisch:</u> In 1990, the SJRWMD purchased the 3,544-acre Fisch property for \$3,200,000 using Save Our River funds. Included in the acquisition was a 106-acre donation to the SJRWMD as mitigation for an off-site project.

<u>Eckerd/Swann Bird Lake Donation/Mitigation Parcels:</u> In December 1990, 656 acre and 87 acre parcels were donated as mitigation for an off-site project.

<u>Audubon of Florida property:</u> In 2001, the District entered into an agreement with Audubon of Florida to manage approximately 725 acres located adjacent to CMCA.

Starting in 2000 and ending in 2009, the Great Outdoors donated five parcels totaling approximately 1,075 acres to the SJRWMD as mitigation.

Not included in the acreage for Canaveral Marshes Conservation Area is an approximately 4.5 acre parcel that is owned by the U.S. Government. It is located south of S.R. 50, hence on the other side of the highway from the St. Johns National Wildlife Refuge (SJNWR). It is managed as part of Fire Management Unit CM-1 by the SJRWMD.

1.3 Title Interest & Encumbrances

The Canaveral Industrial Park parcel is jointly owned (50%-50% - undivided interest) by the SJRWMD and the Board of Trustees of the Internal Improvement Trust Fund. All of the other parcels that comprise CMCA are owned full fee by the SJRWMD.

Leases can be a useful tool to accomplish land management objectives and will be evaluated and implemented where appropriate. Common examples include cattle grazing and apiaries, and the District remains open to considering other types of leases which are compatible with management of CMCA. The United States Air Force has operated a roughly 0.5-acre lightning detection system site at CMCA since 2006. In 2016, the agreement for this site was converted to a lease. The lease was renewed in 2021 for another five-year term. ^{1st} Amendment to Plan

CMCA is currently encumbered by three, cattle leases and an intergovernmental management agreement with Brevard County for management of Stosberg County Park (now called Leroy Wright Recreation Area). Brevard County Soil & Water Conservation District is the lessee of one of these cattle leases.

The Canaveral Industrial Park and the Fisch property are both encumbered by numerous easements and reservations which include a Florida Power & Light right-of-way and a Florida Gas Transmission Co. easement.

1.4 Proximity to Other Public Lands

There are more than 100 publically-owned lands (>500,000 acres) located within 25 miles of CMCA. These include federal, state, local government-owned lands as well as some privately-owned lands with conservation easements to governmental entities. CMCA is not located within an Aquatic Preserve or an Area of Critical State Concern (Chapter 380.05, FS).

1.5 Adjacent Land Uses

CMCA is currently zoned with seven different classifications. The majority of the property is zoned General Use, but other classifications include Agricultural, Recreational Vehicle Park, and Rural Residential.

The current future land use designations for the property include Public-Conservation, Private-Conservation (Audubon property), Agricultural, and Neighborhood Commercial. The Neighborhood Commercial designation is on a very small part of the property located near S.R. 50.

1.6 Public Involvement

This plan was prepared with input from the Canaveral Marshes Conservation Area Management Plan Advisory Group (MAG). The MAG meeting was conducted on March 12, 2014. A summary of the MAG meeting is located in Addendum B.

A noticed public meeting was held in conjunction with a Southern Recreational Public Meeting, an annual public meeting coordinated by SJRWMD. There are over 150 people, both agency and private citizens, on the meeting's contact list.

The Acquisition and Restoration Council (ARC) public hearing and meeting provide an additional forum for public input and review.

SJRWMD's Governing Board will also be approving this management plan. The Governing Board's Project & Lands Committee reviews the draft plan and votes to either place the plan on the consent agenda for the full Governing Board or require the plan to be brought before the full Governing Board. This will be the fourth forum for the public to provide input to the plan.

Figure 1a – 2010 Aerial - North



Figure 1b – 2010 Aerial - South











Figure 4 – Topography Map









Figure 6 – Natural Communities Map

2. Natural & Cultural Resources

2.1 Physiography

a. Physiography/Mineral Resources

The majority of CMCA lies within the St. Johns Wet Prairie, a sub-district of the Eastern Flatwoods District. A small portion of the conservation area on the northeast corner is located within the Upper St. Johns Karst, also a sub-district of the Eastern Flatwoods District.

The St. Johns Wet Prairie is comprised of Late Pleistocene lagoonal deposits dominated by marshes and cabbage palm hammocks (Brooks). The Upper St. Johns Karst is comprised of poorly drained flatwoods in which shell deposits have resulted in karst depressions (Brooks, 1981).

There are no known outstanding mineral resources on this property.

b. Topography

The property exhibits very little elevation relief, with the highest natural elevation around 17 feet above mean sea level in the northern portion and on scattered hammocks throughout the site (Figure 4). There are a few areas of dredge spoil, associated with ditches, that reach 21 ft. in elevation.

The river elevation drops an average of only one-foot per five river miles with approximately 20 to 25 river miles in the project area. The low gradient and large floodplain allows the properties of the Upper St. Johns River to function as a water storage area, regulating water levels during high and low water stages.

c. Soils

The U.S. Department of Agriculture, Natural Resources Conservation Service recognizes 29 different soil series within CMCA (Figure 5). Addendum C contains soil descriptions from the Brevard County Soil Survey.

2.2 Natural Communities

The natural communities at CMCA were mapped by SJRWMD staff, in 2013, utilizing a combination of historic and current aerials, soils, and field verification. For this plan, only the current natural communities are mapped. They are very similar to the historic natural communities.

Approximately 99% of the CMCA is wetlands, primarily floodplain marsh. The only upland areas are the mesic flatwoods, shell mounds, and some of the improved pastures.

A natural communities map can be found in Figure 6.

Following are natural community descriptions of CMCA following the Florida Natural Areas Inventory (FNAI) classification system (FNAI, 2010).

a. Floodplain marsh (9,974 acres)

Floodplain marsh is a wetland community located within the floodplain of a river. It is dominated by grasses, sedges, and other herbaceous vegetation. Long hydroperiods and frequent fires are both important in maintaining this natural community. The absence of one, or both, can quickly lead to the succession to a shrub-dominated marsh.

Due to slight changes in elevation, the marsh surface is a mosaic of wetland vegetation. The wetter areas are dominated by pickerelweed and arrowheads and the drier portions contain graminoids and forbs. This diversity of habitat within a marsh is also evident in the associated wildlife utilizing it, particularly wading and shore birds.

Floodplain marsh is the most common natural community within CMCA comprising approximately 85% of the property. The quality of the marsh varies depending on the amount of shrub or tree encroachment. Prior to acquisition, ditches were constructed in the marsh to shorten the hydroperiod so it could be used for agricultural pursuits. A common component of the marsh at CMCA is a mixture of pasture grasses, primarily Bermuda and bahia.

The SJRWMD maintains three cattle leases. The cows mostly utilize the marsh for grazing. The cattle leases are a tool to assist in the management of the marshes. The cattle lessees also provide services, such as mowing and roller-chopping, to improve the quality of the grazing and aid in the restoration of the marsh. Over the past fifteen years, thousands of acres of shrub-encroached marsh have been mowed or roller-chopped, and followed up with prescribed burns.

b. Hydric hammock (370 acres)

Hydric hammock is a hardwood and cabbage palm dominated forest occurring on moist soils. The canopy is composed of oaks, cabbage palm, and red cedar. The understory is usually open with ferns and numerous vines.

There are numerous examples of hydric hammock scattered throughout CMCA. The overstory is comprised of laurel oak, red cedar, live oak, and cabbage palm. Epiphytes on the cabbage palms are numerous (golden polypody, shoestring fern). The groundcover is comprised of swamp fern, woodsgrass, and chain fern. An unfortunate component of all of the hammocks at CMCA is Brazilian pepper.

c. Prairie hydric hammock (192 acres)

Prairie hydric hammock is a type of hydric hammock with an overstory dominated by cabbage palm. It is difficult to separate from hydric hammock. For the purposes of this plan, the separation is based on the size of the hammock and the percentage of cabbage palms.

d. River floodplain lake (175 acres)

A river floodplain lake is a shallow open-water area, typically perennial, surrounded by floodplain swamp.

The areas mapped at CMCA as river floodplain lake are not surrounded by swamp. Some are lentic, but some are connected to a blackwater stream. They are wide-open water areas in the floodplain marsh, so they do not exactly fit the Florida Natural Areas Inventory definition of a river floodplain lake.

e. Basin marsh (550 acres)

A basin marsh is a large herbaceous wetland that is inundated most of the year. The wetter portions typically have water and pond lilies, pickerweed, arrowheads, sawgrass, and cattail. The drier portions are dominated by maidencane and sand cordgrass. Typical shrubs include coastalplain willow, wax myrtle, and salt bush. A lack of fire and/or a shortened hydroperiod will expedite the succession of this community to become shrub-dominated.

The basin marsh at CMCA is named Bird Lake Marsh. It is surrounded by residential development and roads and has a large canal (Addison Canal) bisecting it, making it very difficult to manage, particularly with fire. At this time, there are no plans to apply prescribed fire to Bird Lake Marsh. It is anticipated that it will succeed into a basin swamp.

f. Blackwater stream (183 acres)

Blackwater streams are dark-colored streams arising from rain water-driven swamps that discharge slowly into the stream. They are typically slightly acidic, perennial streams with limited vegetation. Most of the plants are emergent such as golden club and various grasses and sedges.

The blackwater streams at CMCA are mostly side channels of the St. Johns River. There are two unnamed streams that flow from the east to west, originating east of CMCA, that empty into the St. Johns River.

g. Depression marsh (2 acres)

Depression marshes are small, circular wetlands with sandy substrates located within an upland natural community such as mesic flatwoods. The vegetation is usually found in bands as a result of the hydroperiod and the depth of flooding within the wetland. The center of the wetland is typically the deepest and normally has pickerelweed and maidencane. The drier portions of the wetland tend to have St. Johns wort, queen's delight, and various grasses, sedges and rushes. At CMCA, there are two examples of depression marsh. Both are located within a small patch of mesic flatwoods. They share most of the same plant species as the floodplain marsh located to the south and west of the flatwoods.

h. Mesic flatwoods (88 acres)

A mesic flatwood is a flat, upland forest with an open canopy of pines and typically a diverse understory of grasses, forbs, and low shrubs. Plants and animals within this natural community must cope with seasonal flooding as well as droughty conditions. The mesic flatwoods within CMCA are located on slightly elevated areas extending into the floodplain or basin marsh. The flatwoods located adjacent to The Great Outdoors have been actively grazed for a number of years and contain pasture grasses. However, they also have characteristic flatwoods plants such as slash pine, saw palmetto, wiregrass, gallberry, and shiny blueberry.

i. Shell mound (2 acres)

There are two shell mounds on CMCA that contain a variety of sub-tropical plants indicative of shell mounds. Typical plants include cabbage palm, live oak, sugarberry (*Celtis laevigata*), Florida swampprivet (*Forestiera segregata*), Spanish stopper (*Eugenia foetida*), white stopper (*Eugenia axillaris*), rougeplant (*Rivina humilis*), white indigoberry (*Randia aculeata*), and hercules-club (*Zanthoxylum clava-herculis*). They are not located on the Natural Communities map (Figure 5). Both middens have a light to moderate amount of disturbance, particularly from cattle. There are limited signs of human digging. They also are infested with Brazilian pepper.

Altered Land Types

j. Improved pasture (83 acres)

There is a continuous area of improved pasture associated with a finger of slightly elevated land in the southern portion of the property. It is surrounded by lateral ditches which drain into the St. Johns River. This is a wet pasture dominated by Bermuda and bahia grass, but contains a moderate amount of maidencane, and various sedges and wildflowers.

k. Impoundment/artificial pond (25 acres)

There are twelve impoundment/artificial ponds on CMCA ranging from borrow sites to stormwater ponds.

l. Canal/ditch (21 acres)

There are approximately 8 miles of canals/ditches within CMCA. Over 60% of that total is associated with the Addison-Ellis Canal, constructed in 1912-13.

m. Utility corridor (26 acres)

There are two electrical transmission lines crossing CMCA. One traverses the property from S.R. 50 southeast to the western edge of the Great Outdoors. It is approximately 2 miles long and 50 ft. wide and has an assisting road that is slightly elevated along more than half its length. It traverses mostly floodplain marsh. The other corridor is located near the south end of the property, just north of C.R. 520. It is approximately ½ mile long and 175 ft. wide. There is no assisting road and it also traverses primarily floodplain marsh.

2.3 Plant & Animal Species

CMCA contains a wide variety of plants and animals, in particular those species associated with floodplain marsh – the dominant natural community on the property. The non-woody plants in the marsh are well represented, primarily as a result of the active fire management program. Wildflower diversity is quite high. The cultural middens contain numerous sub-tropical plant species found nowhere else on the property.

Bird diversity is high. Wading and shorebirds are numerous, along with raptors. Perhaps the most notable raptor is the crested caracara, which nests on the property. A list of plants, animals, and listed species identified from the property is located in Addendum D.

2.4 Listed Species

a. Audubon's crested caracara

Florida Fish & Wildlife Conservation Commission.

This is a large falcon found in open habitat such as the expansive floodplain marsh along the St. Johns River. Nests are non-conspicuous, typically constructed in the tops of cabbage palms. Nesting normally occurs in the winter-early spring and has been documented in the dozen or so counties located in south central Florida. They eat a wide variety of small vertebrates, including carrion. This species is listed as Threatened by both the U.S. Fish & Wildlife Service and the There is one documented nest within the southern portion of CMCA and an additional nest located just west of the CMCA boundary just south of S.R. 50.

b. Wading birds

The floodplain marsh within and adjacent to CMCA supports a wide variety of listed wading birds such as great egret, little blue heron, snowy egret, tricolored heron, roseate spoonbill, white ibis, and glossy ibis. A couple of mixed species roosts have been identified within CMCA, but no rookeries.

The wading birds, shorebirds, and terns are all important components of the eco airboat tours on the marsh.

c. Wood stork

This federal and state endangered bird is commonly seen in the marsh ponds and ditches within CMCA. The closest rookery is approximately 2½ miles east of the southernmost portion of the property. All of CMCA is within the core foraging area for this rookery as established by the U.S. Fish & Wildlife Service.

d. Florida black bear

Black bears and their prints or scat are occasionally observed within CMCA. CMCA is located 10 miles south of the secondary range of the St. Johns bear population per FWC data.

e. Bald eagle

Currently there is only one documented bald eagle nest within CMCA. In addition, there are five documented nests with two miles of CMCA. Bald eagle sightings within the conservation area are common during the winter and spring.

f. American alligator

As one would expect, alligators are abundant within and adjacent to CMCA. The local eco-tour airboat trips can often be seen stopping and admiring some of the larger individuals. Currently, alligator harvest is not allowed on the stretch of the St. Johns River adjacent to CMCA partly because of the eco-tourism value.

2.5 Forest Resources

Chapters 253 and 259, Florida Statutes, require an assessment of the feasibility of managing timber in land management plans for parcels greater than 1,000 acres if the lead agency determines that timber management is not in conflict with the primary management objectives of the land.

During the development of this plan, it was determined that timber management activities are not necessary at CMCA to meet the desired management objectives.

2.6 Native Landscapes

The native landscapes at CMCA include floodplain marsh, hydric hammock, river floodplain lake, blackwater stream, prairie hammock, basin marsh, depression marsh, shell mound, and mesic flatwoods. They are all described in more detail in the Natural Communities section (Section 2.2).

2.7 Water Resources

a. Surface Water

Over twelve miles of CMCA's western boundary is the St. Johns River and it's numerous miles of braided streams. In addition there are several, unnamed blackwater streams that flow through the property from the east and empty into the St. Johns River.

There are four moderate to large canals that flow east to west through CMCA. The largest is the Addison-Ellis Canal constructed in 1912-13.

The St. Johns River Water Management District maintains thirteen active surface water monitoring stations within a five mile radius of CMCA.

All waters within, and adjacent to, CMCA are considered Class III by DEP. The waters in the southern portion of CMCA (south of the large powerline that bisects the conservation area, just north of C.R. 528) are designated as Outstanding Florida Waters as a result of their previous inclusion within Tosohatchee State Reserve. A Hydrography map is located in Figure 7.

b. Ground Water

There are no known portions of CMCA in which there is groundwater recharge occurring. The St. Johns River Water Management District maintains fifteen active groundwater monitoring wells within a five mile radius of CMCA.

2.8 Beaches & Dunes

There are no beaches or dunes within CMCA.

2.9 Cultural Resources

There are four, documented Florida Master Sites located on CMCA. Two are prehistoric middens, one is an aboriginal canoe, and the last is an historic canal. During the field

work for this plan, possibly three additional midden sites were identified. If verified, they will be recorded in the Master Site.

2.10 Scenic Resources

The vast, open vistas across the St. Johns River marsh are significant scenic resources. There are numerous airboat, tour companies that provide eco-tours along the St. Johns River adjacent to, and within, CMCA.

3. Uses of the Property

3.1 Previous Use & Development

This property has seen constant use and habitation since prehistoric times. There are Native American midden and mound sites all along this stretch of the St. Johns River. Most of CMCA is located within the Delespine Spanish Land Grant. Joseph Delespine was a French physician who received the 43,000-acre land grant in 1817. Cattle were extremely important during the Second Spanish Period and likely grazed the areas of the land grant that were adjacent to the St. Johns River.

In 1912-13, the Addison/Ellis Canal was constructed from the St. Johns River east towards the Indian River in an attempt to drain the marshlands east of the river for agriculture. Although never hydraulically connecting the two, the canal has altered the hydrology of the area.

3.2 Purpose for Acquisition

CMCA is part of SJRWMD's Upper Basin Project. Lands in the Upper Basin were acquired to implement the restoration of the St. Johns River floodplain and to protect lands with a high water resource value and related environmental benefits.

3.3 Single or Multiple-Use Management

CMCA is managed under the multiple-use concept. The property provides numerous public outdoor recreational and educational opportunities all the while maintaining three cattle leases.

All of the current uses and activities within CMCA are considered to be in accordance with the purposes of acquisition, SJRWMD's agency mission, and the Conceptual State Lands Management Plan. During the planning process for this plan, it was determined that no additional uses and activities would be considered at this time.

3.4 Surplus Acreage

In 2012, the SJRWMD designed and implemented a comprehensive "Lands Assessment" process. No lands within CMCA were recommended for surplus or exchange, as a result of this assessment.

4. Management Activities & Intent

The following section describes how the SJRWMD will manage the diverse natural and cultural resources at CMCA. The general goals guiding management on CMCA include:

- Maintain water quality, natural hydrological regimes, and flood protection by preserving important wetland areas.
- Restore, maintain, and protect native natural communities and diversity.
- Maintain and protect cultural resources.
- Provide opportunities for recreation where compatible with the above listed goals.

4.1 Land Management Review (Management Review Team)

The last Management Review Team (MRT) was conducted in May 2010. The consensus was that CMCA is being managed for the purposes for which it was acquired, it is being managed in accordance with its management plan, and the current management plan provides sufficient protection to the property's natural and cultural resources.

4.2 Habitat Restoration & Improvement

The floodplain marsh is the priority target for restoration/enhancement activities at CMCA. Many areas of floodplain marsh have been encroached upon by woody plant species. The cows in the three cattle lessees are important for reducing the woody shrub encroachment. The cattlemen also provide services such as mowing and roller chopping. All of these activities are important management tools as a precursor to fire. In addition, the SJRWMD plans to reduce the fire return interval in the floodplain marsh to a 2-3 year cycle. Figure X depicts the location of the three cattle leases.

Exotic plant and animal species are monitored and treated/removed as needed.

4.3 Prescribed Fire & Fire Management

Fire is a vital factor in managing the character and composition of vegetation in many of the natural communities in Florida. The SJRWMD's primary use of fire is to mimic natural fire regimes to encourage the amelioration of native pyric natural communities and dependant wildlife. Additionally, the application of fire aids in the reduction of fuels and minimizes the potential for catastrophic and damaging wildfires. Most of the natural communities within CMCA are (or historically were) fire adapted, making prescribed fire an important tool for use in the restoration and maintenance of natural communities within the conservation area.

Since 2004, SJRWMD staff have applied prescribed fire to 11,524 acres within CMCA. Figure 8 depicts the fire management units (FMU) and Table 1 illustrates the prescribed fire history at CMCA.

There are approximately 9,974 acres of fire-maintained natural communities within CMCA (91% of the conservation area). Bird Lake Marsh (FMU CM-12) is an approximately 740-acre basin marsh with embedded prairie hydric hammocks. It is completely isolated from the rest of CMCA by major highways and homes. At this time, there are no plans to apply prescribed fire to Bird Lake Marsh. It is anticipated that it will succeed into a basin swamp.

There are four additional FMU's on the Fire Management Unit map (Figure 8) that have no prescribed fires planned for them (CM-11, CMS-3, CMS-4, and CMS-5) at this time. CM-11's wildland-urban interface and boundary shape make prescribed fire application extremely difficult. CMS-3, CMS-4, AND CMS-5 are predominantly open water.

Historically, the majority of fires occurring on CMCA were ignited by lightning during the growing season. The SJRWMD intends to utilize growing season fires where possible, understanding that constraints in some areas such as organic soils and proximity to smoke sensitive areas may require the use of dormant season burning. While prescribed fire is the preferred tool for restoration and maintenance within CMCA, it will be necessary, particularly in the marsh systems, to implement alternative methods. The SJRWMD utilizes management techniques such as mowing and roller chopping in combination with fire as part of an integrated approach to creating and maintaining desired future conditions within the marshes.

A system of condition class measures was originally developed by The Nature Conservancy and the U.S. Forest Service in 2003 as an effort to assess ecosystem health. It was designed as Fire Regime Condition Class (FRCC) and it is based on a relative measure describing the degree of departure from the historical natural fire regime of a given system. This departure results in changes to one (or more) of the following ecological components: species composition, structural stages, stand age, canopy closure, or mosaic pattern. The SJRWMD adapted the system in 2008 to measure ecosystem health and therefore land management effectiveness.

Annually, each burn zone is assigned a condition class score based upon the most recent disturbance and the fire frequency recommended for that natural community by FNAI. If FNAI recommends a fire return interval of 3-5 years, a natural community that has benefited from disturbance in the past 5 years is in condition class 1. If it has been more than 5 years but less than 15 years, or three cycles, the zone is in condition class 2. If it has been more than three times the fire return interval, but can still be recovered by fire, it would fall in to condition class 3. If the natural community has gone without disturbance so long that fire alone can no longer restore the area, it is in condition class 4. SJRWMD staff will make annual condition class assessments and incorporate them into annual burn planning and work planning processes.

All implementation of prescribed fire within the CMCA will be conducted in accordance

with the SJRWMD's Draft Fire Management Plan, the CMCA Fire Management Plan (Addendum E), and the annual burn plan for the property.

Zone #	Acreage	Burn Dates
CM-1	961	1/25/1996, 3/23/2004, 2/23/2009, 4/26/2013
CM-2	102	4/9/1997, 3/29/2004, 2/8/2010
CM-3	307	2/21/2000, 1/26/2006, 10/20/2009
CM-4	122	None
CM-5	939	2/21/2000, 4/28/2005, 2/15/2011, 1/8/2014
CM-6	569	1/6/2000, 2/1/2012
CM-7	829	1/6/2000, 4/18/2005, 2/26/2009
CM-8	639	None
CM-9	482	4/19/2005
CM-10	128	None
CMS-1	1,704	3/3/2004, 3/28/2012
CMS-2	1,656	3/3/2004, 4/28/2006

Table 1. – Fire History

4.4 Listed Species

To date, twenty-three listed species have been identified on CMCA. Additional inventory work is needed, and will be performed. There are no species-specific management activities being considered at this time for any of the listed species. Most of the listed species are birds that utilize the floodplain marsh, so the marsh restoration efforts underway will be a benefit to these species. A list of listed species is located in Addendum X.

4.5 Exotic & Invasive Species Management & Control

Exotic plant removal efforts at CMCA have concentrated on Brazilian pepper and cogon grass. Brazilian pepper is found throughout the property, particularly on human-altered areas such as canal berms. Other invasive plant species that occur on the property include guava and Caesar weed on the middens, and several species of pasture grasses in the marsh. Priority removal efforts at CMCA are based on the severity of the infestation and the species' status as a Florida Exotic Pest Plant Council (FLEPPC) Category I or II plant.

Common reed (*Phragmites australis*) and Carolina willow (*Salix caroliniana*) are two, native nuisance species that will be managed at CMCA. Both species have the ability to form monoculture stands in the marsh.

Currently, the only exotic animals managed at CMCA are feral hogs. All three of the cattle lessees control hogs on their areas of responsibility. No live hogs can be transported from the property. The cattle lessees provide a monthly report of the number, sex, and size of the hogs removed.



Figure 7 – Hydrography Map





Figure 9 – Recreation Map





Figure 10 – Cattle Lease Map
4.6 Public Access & Recreational Opportunities

Upland access to CMCA is from a SJRWMD-maintained parking area and trailhead on the south side of S.R. 50, just east of the St. Johns River. A 4.5 mile multi-use trail originates at this point (Figure 9).

All other public access to the property is from the St. Johns River. There are public boat ramps on the north and south end of CMCA.

Recreational opportunities at CMCA include boating, paddling, hiking, fishing, bicycling, geocaching, and wildlife viewing. Public hunting occurs on the sovereign portions of the property.

4.7 Hydrological Preservation & Restoration

While water resources are largely intact and most preservation was accomplished with acquisition, there are some disturbances. These include the three major highways that cross CMCA and the four ditches and associated berms that enter CMCA from the east. It is unlikely that the ditches can be back-filled or plugged due to the potential tail water conditions that could negatively impact the areas east of the property.

4.8 Forest Resource Management

An assessment of the limited forest resources at CMCA was conducted by SJRWMD staff. It was determined that all of the resource management objectives of this conservation area would be achieved without conducting any timber management activities within this planning cycle.

4.9 Cultural Resources

SJRWMD will make every effort to protect cultural resources. SJRWMD land management staff have maps depicting the known FL Master Sites on CMCA. SJRWMD will follow the management procedures outlined in "Management Procedures of Archaeological and Historical Sites and Properties on State-owned or Controlled Lands" (Addendum X). The Division of Historical Resources will be contacted regarding any significant ground-breaking activity or any new sites.

4.10 Capital Facilities & Infrastructure

The only facilities on CMCA are the parking area/trailhead just south of S.R. 50 and two inclement weather shelters along the river.

4.11 Optimal Boundary

Three, small out parcels located in the northwest corner of CMCA have been identified for possible acquisition. In addition, there is a large prehistoric midden (Paw Paw Mound) located on private property along the St. Johns River that has been identified for possible acquisition.

4.12 Research Opportunities

The SJRWMD has in place a Special Use Authorization (SUA) license process (Chapter 40C-9.360 FAC) for research projects and other uses. The applicant must provide reasonable assurance that the proposed use is consistent with the Land Management Plan and will not harm the natural and cultural resources of the property.

4.13 Soil Conservation

The CMCA provides tremendous water resource protection benefits. These include flood protection to the surrounding area and water quality protection to the St. Johns River. The SJRWMD will follow all soil erosion and forestry BMP's in the management of this property.

4.14 Cooperating Agencies

The SJRWMD cooperates with the Division of Historical Resources regarding the management of cultural resources and the Florida Fish & Wildlife Conservation Commission regarding the management of wildlife resources. In addition, the SJRWMD has established a cooperative fire management agreement (including a 4.5 acre parcel) with the U.S. Fish & Wildlife Service.

4.15 Arthropod Control Plan

An Arthropod Control Plan has not been developed with the Brevard County Mosquito Control District.

5. Resource Management Goals and Objectives

The resource management goals described below are meant to be broad statements aimed at achieving desired future outcomes at CMCA. The stated time period for short term goals is less than two years and for long term goals, it's up to ten years.

5.1 Habitat Restoration and Improvement

Goal: Maintain, improve or restore natural communities

Short-term

- a. Continue to prescribe burn 2,000 acres of fire-adapted natural communities per year.
- b. Maintain 8,438 acres of fire-adapted natural communities within a 2-4 year target fire return interval.
- c. Conduct habitat/natural community improvement (e.g. mowing and/or roller chopping) in mesic flatwoods and floodplain marsh on 50 acres per year.
- d. To maintain vegetation at an early successional stage, continue the existing cattle grazing leases.

Long-term

- a. Continue to prescribe burn 2,800 acres of fire-adapted natural communities per year.
- b. Continue to maintain 8,438 acres of fire-adapted natural communities within a 2-4 target fire return interval.
- c. Continue habitat/natural community improvement (e.g. mowing and/or roller chopping) in mesic flatwoods and floodplain marsh on 50 acres per year.
- d. To maintain vegetation at an early successional stage, continue the existing cattle grazing leases.

5.2 Listed Species Management

Goal: Maintain, improve, or restore listed species populations and habitats.

Short-term

a. Develop baseline listed species occurrence inventory list.

Long-term

a. Develop and implement monitoring protocols for selected listed species.

5.3 Public Access and Recreational Opportunities

Goal: Provide public access and recreational opportunities.

Short-term

- a. Continue to maintain public access and recreational opportunities.
- b. Continue to maintain 4.5 miles of trails.

Long-term

- a. Continue to maintain public access and recreational opportunities.
- b. Continue to maintain 4.5 miles of trails.

5.4 Hydrological Preservation and Restoration

Goal: Protect water quality and quantity, restore hydrology to the extent feasible, and maintain the restored condition.

Short-term

a. To maintain and enhance natural hydrological functions, install and maintain low water crossings and culverts as appropriate.

Long-term

a. To enhance natural hydrological functions, continue to install and maintain low water crossings and culverts as appropriate.

5.5 Exotic and Invasive Species Maintenance and Control

Goal: Remove invasive plants and animals and conduct needed maintenance-control.

Short-term

- a. As necessary, annually treat at least 3 acres of Florida Exotic Pest Plant Council (FEPPC) Category I and Category II invasive exotic plant species including Brazilian pepper, cogon grass, guava, and tropical soda apple.
- b. Continue control measures on feral hogs.

Long-term

- a. As necessary, annually treat at least 15 acres of Florida Exotic Pest Plant Council (FEPPC) Category I and Category II invasive exotic plant species including Brazilian pepper, cogon grass, guava, and tropical soda apple.
- b. Continue to locate, map and control additional infestations of Category I & II plants.
- c. Continue control measures on feral hogs.

5.6 Capital Facilities and Infrastructure

Goal: Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.

Short-term

- a. Maintain the existing parking area/kiosk and inclement weather shelters.
- b. Maintain the approximately 12 miles of roads.
- c. As necessary, maintain, improve, or repair 4.5 miles of existing trails.

Long-term

- a. Maintain the existing parking area/kiosk and inclement weather shelters.
- b. Maintain the approximately 12 miles of roads.
- c. As necessary, maintain, improve, or repair 4.5 miles of existing trails.

5.7 Cultural Resources

Goal: Protect, preserve, and maintain the cultural resources of CMCA.

Short-term

- a. Ensure all known sites are recorded in the Florida Department of State's Florida Master Site file.
- b. Continue to monitor, protect, and preserve the four documented Master Sites in accordance with DHR procedures.
- c. Work with the Florida Public Archaeological Network to document new sites.

Long-term

a. As determined by DHR, continue to monitor, protect and preserve the four documented Master Sites in accordance with DHR procedures.

5.8 Research Opportunities

Goal: Explore and pursue cooperative research opportunities.

Short-term

a. Continue to cooperate with researchers and universities as appropriate.

b. Continue to assess the need for, and pursue, research and environmental education partnership opportunities as appropriate.

Long-term

- a. Continue to cooperate with researchers and universities as appropriate.
- b. Continue to assess the need for and pursue research and environmental education partnership opportunities as appropriate.

5.9 Outreach

Goal: Provide information to The Great Outdoors board and homeowners regarding management activities, particularly prescribed burns.

Short-term

- a. Continue to participate on the Firewise Committee for The Great Outdoors.
- b. Continue to include The Great Outdoors when planning prescribed burns.

Long-term

- a. Continue to participate on the Firewise Committee for The Great Outdoors.
- b. Continue to include The Great Outdoors when planning prescribed burns.

6. Ten-year Implementation Schedule, Measures, and Cost Estimates

GOAL 5.1	Maintain, improve or restore natural communities	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)
Objective A	Continue to prescribe burn 2,000 acres of fire- adapted natural communities per year.	Acres burned	ST	\$22,000	\$44,000
Objective B	Prescribe burn 2,800 acres of fire-adapted natural communities per year to reach the optimum fire return interval.	Acres burned	LT	\$30,800	\$246,400
Objective C	Conduct habitat/natural community improvement (e.g. mowing and/or roller chopping) in mesic flatwoods and floodplain marsh on 50 acres per year.	Acres treated	0	\$3,450	\$34,500
Objective D	To maintain vegetation at an early succession stage, continue the existing cattle grazing leases.	Cattle lease acres	0	No additional cost	No additional cost
GOAL 5.2	Maintain, improve, or restore listed species populations and habitats.	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)
Objective A	Develop baseline listed species occurrence inventory list.	Baseline list completed	ST	\$1,500	\$15,000
Objective B	Develop and implement monitoring protocols for select listed species.	Protocols completed	LT	\$1,000	\$8,000
GOAL 5.3	Provide public access and recreational opportunities.	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)
Objective A	Continue to maintain public access and recreational opportunities.	Sites maintained	0	\$500	\$5,000
Objective B	Continue to maintain 4.5 miles of trails.	Trails maintained	0	\$1,000	\$10,000
GOAL 5.4	Protect water quality and quantity, restore hydrology to the extent feasible, and maintain the restored condition.	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)
Objective A	To maintain and enhance natural hydrological functions, install and maintain low water crossings and culverts as appropriate.	Crossings and culverts maintained	ST	\$1,000	\$2,000
Objective B	To enhance natural hydrological functions, continue to install and maintain low water crossings and culverts as appropriate.	Crossings and culverts installed	LT	Project specific	Project specific
GOAL 5.5	Remove invasive plants and animals and conduct needed maintenance/control	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)
Objective A	As necessary, annually treat at least 3 acres of Florida Exotic Pest Plant Council (FEPPC) Category I and Category II invasive exotic plant species including Brazilian pepper, cogon grass, guava, and tropical soda apple.	Acres treated	ST	\$3,000	\$6,000
Objective B	As necessary, annually treat at least 15 acres of Florida Exotic Pest Plant Council (FEPPC) Category I and Category II invasive exotic plant species including Brazilian pepper, cogon grass, guava, and tropical soda apple.	Acres treated	LT	\$15,000	\$120,000
Objective C	Continue to locate, map and control additional infestations of Category I & II plants.	Number of surveillance days	0	\$1,000	\$10,000
Objective D	Continue control measures on feral hogs.	Number of hogs removed	0	Responsibility of the cattle lessees	Responsibility of the cattle lessees
GOAL 5.6	Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)

Objective A	Maintain the existing parking area/kiosk and inclement weather shelters.	Facilities maintained	0	\$500	\$5,000
Objective B	Maintain the approximately 12 miles of roads.	Roads maintained	0	\$2,500	\$25,000
Objective C	As necessary, maintain, improve, or repair 4.5 miles of existing trails.	Trails maintained	0	Cost in Goal 5.3 B	Cost in Goal 5.3 B
GOAL 5.7	Protect, preserve, and maintain the cultural resources of CMCA.	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)
Objective A	Ensure all known sites are recorded in the Florida Department of State's DHR Master Site file.	All sites recorded	ST	\$1,000	\$10,000
Objective B	Continue to monitor, protect, and preserve the four identified Master Sites in accordance with DHR procedures.	Sites protected	0	\$2,500	\$25,000
GOAL 5.8	Explore and pursue cooperative research opportunities.	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)
Objective A	Continue to cooperate with researchers and universities as appropriate.	Issue appropriate authorization	0	No additional cost	No additional cost
GOAL 5.9	Provide information to The Great Outdoors board and homeowners regarding management activities, particularly prescribed burns.	MEASURE	PLANNING PERIOD	ESTIMATED COST (per year)	ESTIMATED COST (10 year)
Objective A	Continue to participate on the Firewise Committee for The Great Outdoors.	Attend meetings	0	\$1,500	\$15,000
Objective B	Continue to include The Great Outdoors when planning prescribed burns.	Successful burns	0	No additional cost	No additional cost
				\$88,250	\$580,900

\$88,250

ST = action within 2 yearsO = ongoingLT = action within 10 years

7. Resource Management Challenges and Strategies

The greatest resource management challenge at CMCA is the difficulty in accessing most of the property from the land. Approximately 99% of the conservation area is wetlands, primarily floodplain marsh. Airboats are utilized to access most of the property.

When water levels on the St. Johns River are low, illegal ATV access can be problematic, particularly in the southeast corner of the property (just north of S.R. 520). During those times, both FWC and Brevard County law enforcement officers assist in controlling this activity.

8. Analysis of Potential for Contracting Private Vendors for Restoration and Management Activities

The following management and restoration activities are provided by private vendors.

- Parking area and trailhead mowing •
- Mowing of internal "roads"

In addition, all three of the cattle lessees provide in-kind services such as roller-chopping, mowing, fireline maintenance, and security.

Resource Management Goals & Objectives	Progress
WATER RESOURCE PROTECTION	8
Identify and work to acquire additional lands within the floodplain.	Ongoing
FIRE MANAGEMENT	
Continue prescribed burn program with a goal of burning approximately one-	50%
third or 3,000 acres per year.	
Continue mechanical treatment of invasive shrub species to aid facilitation of	Ongoing
prescribed fire which in turn facilitates herbaceous plant growth.	
PLANTS & ANIMALS	
Continue to add to species lists.	Ongoing
Identify special protection areas and management strategies for threatened,	Not Completed
endangered, or imperiled species and communities.	1
EXOTIC PLANTS & ANIMALS	
Continue coordinating with Vegetation Management staff to set up	Ongoing
monitoring and treatment of Brazilian pepper and other exotic plants.	1000/
Continue to coordinate with cattle lessee for hog removal.	100%
ACCESS	
ACCESS	Onacina
Continue regular maintenance on access area.	Ongoing
	Oligonig
RECREATION	
Continue regular maintenance on trails.	Ongoing
SECURITY	
Continue coordinating with cattle lessee, Brevard County Sheriff's office and	Ongoing
Plantation Security, if necessary.	
ACQUISITION Continue to pursue potential acquisitions in this area	Ongoing
Continue to pursue potential acquisitions in this area.	Oligonig
COOPERATIVE AGREEMENTS	
Maintain agreements to assist with the management and maintenance of	100%
Canaveral Marshes Conservation Area	
LEASES, EASEMENTS, AND CONCESSIONS	
Develop additional cattle leases for conservation area.	100%
Monitor the four easements.	100%

9. Accomplished Objectives from 2004 Management Plan

10. Compliance with Federal, State, and Local Government Requirements

Management of CMCA under the multiple-use concept complies with the State Lands Management Plan. This plan is also in conformance with the Brevard County Comprehensive Plan (see Addendum F).

11.Income and Expenses

In an average year, the income generated by this property is approximately \$19,000 and the expenses are approximately \$38,000. The income generated by the three cattle lessees is typically in-kind services (fence and fireline maintenance, restoration mowing and roller-chopping, and invasive plant herbicide treatment).

12.References

Brooks, H. (1981). *Guide to the Physiographic Division of Florida*. Institute of Food and Agricultural Sciences. Gainesville: University of Florida.

Florida Natural Areas Inventory. (2001). *Field Guide to the Rare Animals of Florida, Tallahassee, FL*.

Florida Natural Areas Inventory. (2010). *Guide to the Natural Communities of Florida*. Tallahassee, FL.

Official Soil Series Descriptions - USDA-NRCS Soil Survey Division.

ADDENDA

ADDENDUM A – Trustees Letter



Florida Department of Environmental Protection

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

July 13, 2009

Ms. Terri Mashour St. Johns River Water Management District 4049 Reid Street Palatka, FL 32178-1429

RE: Canaveral Industrial Park

Dear Ms. Mashour,

This letter is to inform the St. Johns River Water Management District (District) of our legal staff's position on whether or not a lease needs to be granted to the District for the management of the above mentioned property. The District and the Board of Trustees of the Internal Improvement Trust Fund (BOT) have 50/50 ownership interest in the property.

The District, as co-owner, has the right to possess the property. A lease is not required for the District to police and manage the property as long as best management practices are used.

If you have any questions about this matter, you may call me at 850.245.2720.

Sincerely, Irm

Kime Landes Bureau of Public Land Administration Mail Station 130 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

"More Protection, Less Process" www.dep.state.fl.us

ADDENDUM B – Management Advisory Group

Canaveral Marshes Conservation Area

Management Advisory Group Meeting

Enchanted Forest Sanctuary - March 12, 2014

In attendance:

Jason DePue – Department of Environmental Protection – Florida Park Service District Biologist (FPS)

Tom O'Neill – Florida Fish & Wildlife Conservation Commission – Tosohatchee Wildlife Management Area (FWC)

Tommy Paradise – Department of Agriculture & Consumer Services – Florida Forest Service, Brevard County Forest Area Supervisor (FFS)

Mike Legare – U.S. Fish & Wildlife Service – St. Johns National Wildlife Refuge biologist (USFWS)

Xavier de Seguin des Hons – Brevard County Environmentally Endangered Lands – North Management Region Land Manager (EEL)

Danny Young - Native Plant Society

Keith Lamb - Great Florida Outdoors manager

Daryl Lockhart - Midway Fish Camp owner

Bert Townsend - cattleman & SJRWMD cattle lessee

Steve Miller, Pete Henn & J.B. Miller – St. Johns River Water Management District (SJRWMD)

Invited & Accepted, did not attend, but provided comments:

Jim Escoffier - Florida Trail Association

Invited & Accepted, did not attend:

Charles Lee – Florida Audubon

Elisabeth Mahan – A Day Away Kayak Tours owner

On March 12, 2014, the Management Advisory Group for Canaveral Marshes Conservation Area convened at the Enchanted Forest Sanctuary in Titusville, Florida at 10:00 a.m.

J.B. Miller (SJRWMD) opened the meeting by thanking everyone for their attendance and explaining the purpose and process of the Management Advisory Group. Mr. Miller provided a brief overview of Canaveral Marshes Conservation Area. Mr. Henn (SJRWMD) then provided an overview of the natural and cultural resources and recreation management accomplishments since the last management plan. Mr. Miller then asked each member of the Management Advisory Group to provide comments on the draft management plan.

Summary of MAG Comments

Jason DePue

- Suggested creating Fire Management Units (FMU) for those areas in the draft plan that do not have FMU's.
- Provided several editorial changes.
- Suggested including fireline accomplishments, long-term monitoring for marsh restoration, and expanding the information regarding the hog removal program.

Tom O'Neill

• Suggested providing more information in management plan regarding exotic plants, including an infestation map and removal numbers – perhaps as an appendix.

Tommy Paradise

- Applauded Pete Henn's burn program at CMCA.
- Reiterated FFS's continued support.

Mike Legare

- Appreciative of management cooperation between USFWS and CMCA.
- Supported the marsh restoration efforts at CMCA.
- Suggested expanding the explanation of chopping & mowing being a pre-cursor to burning in the management plan.

Xavier de Seguin des Hons

• Gave kudos to the cooperation between all of the public land managers in this region

Danny Young

- Admitted that he wasn't familiar with this property, but hoped to become so.
- Provided a number of editorial changes to the draft plan.

Keith Lamb

- Complimentary of Great Outdoors relationship with Pete Henn and his staff.
- Particularly proud of Great Outdoors work in becoming a FIREWISE community.
- Has a concern from his homeowners about airboats on the marsh at night.

Daryl Lockhart

• Appreciative of his relationship with Pete Henn and his staff.

Bert Townsend

- Considers himself as fortunate to be a cattle lessee on a portion of Canaveral Marshes Conservation Area.
- Enjoys his working relationship with Pete Henn and his staff.

Jim Escoffier

- Suggested adding geocaching to the list of recreational users of the property.
- Wanted to let the group know about a proposed trail that will connect Canaveral marshes Conservation Area to the St. Johns National Wildlife Refuge.

After receiving everyone's comments, there was a short discussion. Then Mr. Miller asked the group for any last comments or questions. Meeting adjourned a little after 2:00 p.m.

ADDENDUM C – Soil Descriptions

The following soil series descriptions correspond with soil names found in Figure 5 and are taken directly from the USDA-NRCS using the online query tool.

<u>ANCLOTE</u> - The Anclote series consists of very deep, very poorly drained, rapidly permeable soils in depressions, poorly defined drainage ways, and flood plains. They formed in thick beds of sandy marine sediments. Near the type location, the mean annual temperature is about 75 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 2 percent. Native vegetation consists of cypress, bay, pop ash, pond pine, cabbage palm, red maple, and juncus species.

BASINGER - The Basinger series consists of very deep, poorly drained and very poorly drained, rapidly permeable soils in sloughs, depressions, low flats, and poorly defined drainage ways. They formed in sandy marine sediments. The natural vegetation may consist of wax myrtle, St. Johns wort, maidencane, pineland threeawn, cypress, slash pine, longleaf pine, pond pine, and other water tolerant plants.

<u>CHOBEE</u> – Chobee soils are very deep, very poorly drained, slowly to very slowly permeable soils in depressions, flats, and occasionally on river floodplains in the Lower Coastal Plain. Formed in thick beds of loamy marine sediments. Drained areas are used for citrus, pasture, and range. Most of the soils remain in their natural state and have vegetation consisting of pickerelweed, lilies, sawgrass, and scattered swamp maples in treeless areas. Some areas have a growth of ash, gum, maple and cypress.

DELRAY - Delray soils consist of very deep, very poorly drained, moderately permeable soils on broad flats, floodplains, and depressions in the lower coastal plain. Slopes in these areas range from 0-2%. These soils were formed in sandy and loamy marine sediments. Natural vegetation in these soils includes southern bayberry, pickerelweed, sedges, reeds, water tolerant grasses, and cypress, bay, tupelo, and other water tolerant trees.

EAU GALLIE – The Eau Gallie series consists of deep or very deep, poorly or very poorly drained, slowly permeable soils in flats, sloughs and depressional areas. They formed in sandy and loamy marine sediments in Peninsula Florida. Natural vegetation may consist of longleaf pine, South Florida slash pine, and saw palmetto, with understory vegetation possibly including inkberry, southern bayberry, and pineland threeawn.

FLORIDANA – Floridana soils are very deep, very poorly drained, slowly to very slowly permeable soils on low, broad flats, flood plains, and in depressional areas. They formed in thick beds of sandy and loamy marine sediments. Slopes in areas where this soil is found ranges from 0-1%. Natural vegetation consists of sand cordgrass, cabbage palmetto, myrtle, and pineland threeawn. In depressional areas, most of the soil has a sparse to dense cover of cypress. In floodplains, the vegetation is mostly sweetgum, black gum, red maple, and cypress.

HOLOPAW - The Holopaw series consists of deep and very deep, poorly and very poorly drained soils formed in sandy marine sediments. These soils are rapidly permeable in the A and E horizons and moderately or moderately slowly permeable in the B horizon. These soils are on low lying flats, in poorly defined drainages or depressional areas. Slopes range from 0 to 2 percent. Native vegetation is scattered slash and pond pine, cabbage and saw palmettos, scattered cypress, myrtle, sand cordgrass, and pineland threeawn.

IMMOKALEE - The Immokalee series consists of deep and very deep, poorly drained and very poorly drained soils that formed in sandy marine sediments. They occur on flatwoods and in depressions of Peninsular Florida. Slopes are dominantly 0 to 2 percent but range to 5 percent. Principal vegetation is longleaf and slash pines and undergrowth of saw palmetto, gallberry, wax myrtle, and pineland threeawn. In depressions, water tolerant plants such as cypress, loblolly bay gordonia, red maple, sweetbay, maidencane, blue maidencane, chalky bluestem, sand cordgrass, and bluejoint panicum are more common.

<u>MALABAR</u> – Malabar soils are very deep, poorly to very poorly drained soils in sloughs, shallow depressions, and along flood plains. Formed in sandy and loamy marine sediments. Slopes in areas where these soils are found range from 0-2%. Native vegetation consists of scattered slash pine, cypress, wax myrtle, cabbage palm, pineland threeawn, and maidencane. In depressions, the vegetation is dominantly St. Johns Wort or maidencane.

<u>MYAKKA</u> – Deep and very deep, poorly to very poorly drained soils formed in sandy marine deposits. These soils are on flatwoods, high tidal areas, flood plains, depressions, and gently sloping to barrier islands. Slopes in areas where these soils are found range from 0-8%. Native vegetation includes longleaf and slash pines with an undergrowth of saw palmetto, running oak, inkberry, wax myrtle, huckleberry, chalky bluestem, pineland threeawn, and scattered fetterbush.

<u>PINEDA</u> – Pineda soils are deep and very deep, poorly and very poorly drained, very slowly permeable soils in depressions, low hammocks, poorly defined drainageways, broad low flats, and floodplains. Formed in thick beds of sandy and loamy marine sediments on the lower coastal plain. Slopes in areas where these soils are found range from 0-2%. Native vegetation consists of slash pine, cypress, myrtle, cabbage palm, blue maidencane, chalky bluestem, blue point panicum, sedges, pineland threeawn, and sand cordgrass.

POMELLO - The Pomello series consists of very deep, moderately well to somewhat poorly drained soils that are sandy to depths of more than 80 inches. Pomello soils formed in sandy marine sediments in the flatwoods areas of Peninsular Florida. Slopes range from 0 to 5 percent. Native vegetation is dominated by scrub oak, dwarf live oak, saw palmetto, longleaf pine, slash pine, and pine land threeawn.

<u>POMPANO</u> - The Pompano series consists of very deep, very poorly drained, rapidly permeable soils in depressions, drainageways, and broad flats. They formed in thick beds of marine sands. Near the type location, the mean annual temperature is about 73 degrees F., and the mean annual precipitation is about 50 inches. Slopes range from 0 to 2 percent. Natural vegetation consists of palmetto, widely spaced cypress, gum, and slash pine, and native grasses.

<u>OUARTZIPAMMENTS</u> – Soil usually associated with a borrow pit site.

<u>RIVIERA</u> – Riviera soils are very deep, poorly drained, very slowly permeable soils on broad, low flats and in depressions in the lower coastal plain. They formed in stratified sandy and loamy marine sediments on the lower coastal plain. Slopes in areas where these soils are found range from 0-2%. Native vegetation consists of slash pine, cabbage, and saw palmetto, scattered cypress, maidencane, and pineland threeawn.

SAMSULA - The Samsula series consists of very deep, very poorly drained, rapidly permeable soils that formed in moderately thick beds of hydrophytic plant remains and are underlain by sandy marine sediments. These soils are in swamps, poorly defined drainageways and flood plains. Slopes are less than 2 percent. Natural vegetation is loblolly bay with scattered cypress, maple, gum, and pine trees with a ground cover of greenbriers, ferns, and other aquatic plants.

TERRA CEIA - The Terra Ceia series consists of very deep, very poorly drained organic soils that formed from non-woody fibrous hydrophytic plant remains. They occur mostly in nearly level fresh water marshes and occasionally on river flood plains and in tidal swamps or flats. Natural vegetation includes sawgrass, lilies, sedges, reeds, maidencane, and other aquatic plants. Wooded areas include cypress, black gum, cabbage palm, carolina ash, loblolly bay, red maple, sweetbay, and pond pine. American and white mangrove trees are dominate in tidal areas.

TOMOKA - The Tomoka series consists of deep, very poorly drained, moderately permeable soils that formed in decomposed dark reddish brown and black organic material about 27 inches thick over sand and loamy mineral material. Slopes range from 0 to 2 percent. Native vegetation is sawgrass, lilies, reeds, sedges, myrtle and other aquatic plants. Cypress, red and white bay, maple and pond pine are common tree species.

VALKARIA - The Valkaria series consists of deep, rapidly permeable soils that formed in thick beds of marine sands. These soils occur in broad, poorly defined, low gradient drainageways, depressions and low nearly level areas. Natural vegetation is palms, cabbage palmettos, St. Johnswort, wax myrtle, blue maidencane, chalky bluestem, pineland threeawn, and widely spaced pine and cypress. Maidencane is the most common plant in depressions.

WABASSO - The Wabasso series consists of deep or very deep, very poorly and poorly drained, very slowly and slowly permeable soils on flatwoods, flood plains, and depressions in Peninsula Florida. They formed in sandy and loamy marine sediments. Slopes range from 0 to 2 percent. Most areas of Wabasso soils are in natural vegetation and are used for native range. The natural vegetation consists of longleaf pine, slash pine, cabbage palm, live oak, with an understory of saw palmetto, laurel oak, wax myrtle, chalky bluestem, and pineland threeawn.

ADDENDUM D – Plant, Animal, Listed Species List – Documented at CMCA

Plants	
Genus species	Common Name
Acer rubrum	Southern red maple
Acrostichum danaeifolium	Leather fern
Agalinis linifolia	Flaxleaf false foxglove
Agalinis maritima	Saltmarsh false foxglove
Alternanthera philoxeroides	Alligator-weed *
Ambrosia artemisiifolia	Common ragweed
Andropogon glomeratus	Bushy bluestem
Aristida beyrichiana	Wiregrass
Asimina sp.	Paw paw
Baccharis angustifolia	False willow
Baccharis halimifolia	Groundsel tree, Sea myrtle
Bidens alba	Begger-ticks
Bidens laevis	Burmarigold
Blechnum serrulatum	Swamp fern
Boehmeria cylindrica	False nettle, Bog hemp
Carex spp.	Sedge
Calopogon sp.	Grass pink
Carya glabra	Pignut hickory
Celtis laevigata	Hackberry
Cirsium horridulum	Thistle
Citrus x aurantium	Sour orange *
Cladium jamaicense	Sawgrass
Commelina diffusa	Day-flower
Coreopsis sp.	Tickseed
Echinochloa sp.	Cockspur
Eclipta prostrata	False daisy
Erigeron quercifolius	Oakleaf fleabane
Eugenia foetida	Spanish stopper
Eupatorium capillifolium	Dog fennel
Eustoma exaltatum	Marsh gentian
Forestiera segregata	Florida swampprivet
Heliotropium curassavicum	Seaside heliotrope
Hypericum mutilum	Dwarf St. John's-wort
Ilex cassine	Dahoon holly
Ilex glabra	Gallberry
Juniperus virginiana	Red cedar

Lepidium virginicum	Virginia pepperweed
Liatris sp.	Blazing star
Linaria canadensis	Blue toadflax
Liquidambar styraciflua	Sweetgum
Magnolia grandiflora	Southern magnolia
Magnolia virginiana	Sweetbay
Myrcianthes fragrans	Simpson's stopper
Myrica cerifera	Wax myrtle
Panicum spp.	Panicum
Parthenocissus quinquefolia	Virginia creeper
Paspalum notatum	Bahiagrass *
Phlebodium aureum	Golden polypody
Phragmites australis	Common reed
Pinus elliottii	Slash pine
Pinus taeda	Loblolly pine
Pleopeltis polypodioides	Resurrection fern
Polypogon monspeliensis	Rabbitsfoot grass *
Pontederia cordata	Pickerelweed
Prunus serotina	Wild cherry
Persea borbonia	Red bay
Psidium guajava	Guava *
Quercus geminata	Sand live oak
Quercus laurifolia	Laurel oak; Diamond oak
Quercus nigra	Water oak
Quercus virginiana	Live oak
Randia aculeata	White indigoberry
Rhexia sp.	Meadow beauty
Rivina humilus	Rouge plant
Rubus argutus	Highbush blackberry
Sabal palmetto	Cabbage palm
Sabatia grandiflora	Largeflower rosegentian
Sagittaria spp.	Arrowhead
Salix caroliniana	Carolina willow
Sambucus canadensis	Elderberry
Saururus cernuus	Lizard's-tail
Schinus terebinthifolius	Brazilian pepper *
Serenoa repens	Saw palmetto
Sesuvium portulacastrum	Shoreline seapurslane
Sisyrinchium angustifolium	Annual blue-eyed grass

Smilax laurifolia	Catbrier
Solanum viarum	Tropical soda apple *
Solidago fistulosa	Hollow goldenrod
Spartina bakeri	Sand cordgrass
Tillandsia usneoides	Spanish moss
Tillandsia utriculata	Giant wild pine
Typha latifolia	Common cattail
Ulmus americana	Florida elm
Urena lobata	Caesarweed *
Urtica chamaedryoides	Heartleaf nettle
Vaccinium myrsinites	Shiny blueberry
Vicia acutifolia	Fourleaf vetch
Vitis rotundifolia	Muscadine grape
Vittaria lineata	Shoestring fern
Woodwardia areolata	Netted chain fern
Yucca aloifolia	Spanish bayonet
Zanthoxylum clava-herculis	Herclues-club

"*" Indicates an exotic species

Fish	
Genus species	Common Name
Alosa aestivalis	Blueback herring
Alosa sapidissima	American shad
Ameiurus natalis	Yellow bullhead
Amia calva	Bowfin
Dorosoma petenense	Threadfin shad
Elassoma evergladei	Everglades pygmy sunfish
Erimyzon sucetta	Lake chubsucker
Etheostoma fusiforme	Swamp darter
Fundulus chrysotus	Golden topminnow
Gambusia holbrooki	Mosquitofish
Heterandria formosa	Least killifish
Lepisosteus platyrhincus	Florida gar
Lepomis gulosus	Warmouth
Lepomis macrochirus	Bluegill
Lepomis punctatus	Spotted sunfish
Lucania goodei	Bluefin killifish
Micropterus salmoides	Largemouth bass
Notemigonus crysoleucas	Golden shiner
Noturus gyrinus	Tadpole madtom

Amphibians	
Genus species	Common Name
Acris gryllus dorsalis	Florida cricket frog
Anaxyrus terrestris	Southern toad
Hyla cinerea	Green treefrog
Hyla femoralis	Pine woods treefrog
Hyla squirella	Squirrel treefrog
Lithobates grylio	Pig frog
Lithobates sphenocephalus	Southern leopard frog

Reptiles	
Genus species	Common Name
Agkistrodon piscivorus conanti	Florida cottonmouth
Alligator mississippiensis	American alligator
Anolis carolinensis	Green anole
Apalone ferox	Florida softshell
Colucer constrictor priapus	Southern black racer
Farancia abacura abacura	Eastern mudsnake
Gopherus polyphemus	Gopher tortoise
Pseudemys nelsoni	Florida red-bellied cooter
Seminatrix pygaea	Florida swamp snake
Terrapene carolina bauri	Florida box turtle

Birds	
Genus species	Common Name
Anser albifrons	Greater White-fronted Goose
Aix sponsa	Wood Duck
Anas strepera	Gadwall
Anas americana	American Wigeon
Anas platyrhynchos	Mallard
Anas fulvigula	Mottled Duck
Anas discors	Blue-winged Teal
Anas clypeata	Northern Shoveler
Anas acuta	Northern Pintail
Anas crecca	Green-winged Teal
Aythya affinis	Lesser Scaup
Dendrocygna autumnalis	Black-bellied Whistling-duck
Dendrocygna bicolor	Fulvous Whistling-Duck

Lophodytes cucullatus	Hooded Merganser
Meleagris gallopavo	Wild Turkey
Colinus virginianus	Northern Bobwhite
Podilymbus podiceps	Pied-billed Grebe
Pelecanus erythrorhynchos	American White Pelican
Phalacrocorax auritus	Double-crested Cormorant
Anhinga anhinga	Anhinga
Botaurus lentiginosus	American Bittern
Ixobrychus exilis	Least Bittern
Ardea herodias	Great Blue Heron
Ardea alba	Great Egret
Egretta thula	Snowy Egret
Egretta caerulea	Little Blue Heron
Egretta tricolor	Tricolored Heron
Bubulcus ibis	Cattle Egret
Butorides virescens	Green Heron
Nycticorax nycticorax	Black-crowned Night-Heron
Eudocimus albus	White Ibis
Plegadis falcinellus	Glossy Ibis
Platalea ajaja	Roseate Spoonbill
Mycteria americana	Wood Stork
Coragyps atratus	Black Vulture
Cathartes aura	Turkey Vulture
Pandion haliaetus	Osprey
Elanoides forficatus	Swallow-tailed Kite
Haliaeetus leucocephalus	Bald Eagle
Circus cyaneus	Northern Harrier
Accipiter striatus	Sharp-shinned Hawk
Accipiter cooperii	Cooper's Hawk
Buteo lineatus	Red-shouldered Hawk
Buteo jamaicensis	Red-tailed Hawk
Caracara cheriway	Crested Caracara
Falco sparverius	American Kestrel
Falco columbarius	Merlin
Falco peregrinus	Peregrine Falcon
Rallus elegans	King Rail
Rallus limicola	Virginia Rail
Porzana carolina	Sora
Gallinula galeata	Common Gallinule

Fulica americana	American Coot
Aramus guarauna	Limpkin
Grus canadensis	Sandhill Crane
Charadrius semipalmatus	Semipalmated Plover
Charadrius vociferus	Killdeer
Himantopus mexicanus	Black-necked Stilt
Tringa melanoleuca	Greater Yellowlegs
Tringa flavipes	Lesser Yellowlegs
Tringa solitaria	Solitary Sandpiper
Actitis macularia	Spotted Sandpiper
Calidris pusilla	Semipalmated Sandpiper
Calidris minutilla	Least Sandpiper
Calidris melanotos	Pectoral Sandpiper
Calidris alpina	Dunlin
Calidris himantopus	Stilt Sandpiper
Limnodromus griseus	Short-billed Dowitcher
Limnodromus scolopaceus	Long-billed Dowitcher
Gallinago delicata	Wilson's Snipe
Larus atricilla	Laughing Gull
Larus delawarensis	Ring-billed Gull
Sterna nilotica	Gull-billed Tern
Sterna caspia	Caspian Tern
Sterna forsteri	Forster's Tern
Sterna antillarum	Least Tern
Chlidonias niger	Black Tern
Streptopelia decaocto	Eurasian Collared-Dove *
Zenaida macroura	Mourning Dove
Columbina passerina	Common Ground-Dove
Megascops asio	Eastern Screech-Owl
Bubo virginianus	Great Horned Owl
Chordeiles minor	Common Nighthawk
Chaetura pelagica	Chimney Swift
Ceryle alcyon	Belted Kingfisher
Melanerpes carolinus	Red-bellied Woodpecker
Sphyrapicus varius	Yellow-bellied Sapsucker
Picoides pubescens	Downy Woodpecker
Colaptes auratus	Northern Flicker
Dryocopus pileatus	Pileated Woodpecker
Sayornis phoebe	Eastern Phoebe

Myiarchus crinitus	Great Crested Flycatcher	
Tyrannus tyrannus	Eastern Kingbird	
Lanius ludovicianus	Loggerhead Shrike	
Vireo griseus	White-eyed Vireo	
Vireo solitarius	Blue-headed Vireo	
Vireo olivaceus	Red-eyed Vireo	
Cyanocitta cristata	Blue Jay	
Corvus brachyrhynchos	American Crow	
Corvus ossifragus	Fish Crow	
Progne subis	Purple Martin	
Tachycineta bicolor	Tree Swallow	
Riparia riparia	Bank Swallow	
Petrochelidon pyrrhonota	Cliff Swallow	
Hirundo rustica	Barn Swallow	
Baeolophus bicolor	Tufted Titmouse	
Thryothorus ludovicianus	Carolina Wren	
Troglodytes aedon	House Wren	
Cistothorus platensis	Sedge Wren	
Cistothorus palustris	Marsh Wren	
Regulus calendula	Ruby-crowned Kinglet	
Polioptila caerulea	Blue-gray Gnatcatcher	
Turdus migratorius	American Robin	
Dumetella carolinensis	Gray Catbird	
Mimus polyglottos	Northern Mockingbird	
Toxostoma rufum	Brown Thrasher	
Sturnus vulgaris	European Starling	
Anthus rubescens	American Pipit	
Bombycilla cedrorum	Cedar Waxwing	
Helmitheros vermivorus	Worm-eating Warbler	
Mniotilta varia	Black-and-white Warbler	
Parula americana	Northern Parula	
Setophaga coronata	Yellow-rumped Warbler	
Setophaga discolor	Prairie Warbler	
Setophaga dominica	Yellow-throated Warbler	
Setophaga fusca	Blackburnian Warbler	
Setophaga palmarum	Palm Warbler	
Setophaga petechia	Yellow Warbler	
Dendroica pinus	Pine Warbler	
Setophaga ruticilla	American Redstart	

Vermivora celata	Orange-crowned Warbler
Seiurus aurocapilla	Ovenbird
Seiurus noveboracensis	Northern Waterthrush
Geothlypis trichas	Common Yellowthroat
Wilsonia citrina	Hooded Warbler
Piranga rubra	Summer Tanager
Pipilo erythrophthalmus	Eastern Towhee
Spizella passerina	Chipping Sparrow
Passerculus sandwichensis	Savannah Sparrow
Ammodramus savannarum	Grasshopper Sparrow
Ammodramus henslowii	Henslow's Sparrow
Melospiza melodia	Song Sparrow
Melospiza georgiana	Swamp Sparrow
Zonotrichia albicollis	White-throated Sparrow
Cardinalis cardinalis	Northern Cardinal
Pheucticus ludovicianus	Rose-breasted Grosbeak
Passerina caerulea	Blue Grosbeak
Passerina cyanea	Indigo Bunting
Passerina ciris	Painted Bunting
Dolichonyx oryzivorus	Bobolink
Agelaius phoeniceus	Red-winged Blackbird
Sturnella magna	Eastern Meadowlark
Quiscalus quiscula	Common Grackle
Quiscalus major	Boat-tailed Grackle
Molothrus ater	Brown-headed Cowbird
Carduelis tristis	American Goldfinch

"*" Indicates an exotic species

Mammals	
Genus species	Common Name
Dasypus novemcinctus	Nine-banded armadillo *
Didelphis virginiana	Virginia opossum
Lontra canadensis	River otter
Lynx rufus	Bobcat
Odocoileus virginianus	White-tailed deer
Procyon lotor	Raccoon
Sciurus carolinensis	Gray squirrel
Sigmodon hispidus	Hispid cotton rat

Sus scrofa	Wild pig *
Sylvilagus floridanus	Eastern cottontail
Sylvilagus palustris	Marsh rabbit
Urocyon cinereoargenteus	Gray fox
Ursus americanus	Florida black bear

"*" Indicates an exotic species

LISTED SPECIES

Listed Plants				
Common Name	Scientific Name	DACS	USFWS	FNAI
None documented to date				

Listed Animals				
Common Name	Scientific Name	FWC	USFWS	FNAI
American Alligator	Alligator mississipiensis		S/A	
Black-crowned Night-Heron	Nycticorax nycticorax			S3?
Cooper's Hawk	Accipiter cooperii			S3?
Audubon's Crested Caracara	Caracara cheriway audubonii	Т	Т	S2
Glossy Ibis	Plegadis falcinellus			S2
Gopher Tortoise	Gopherus polyphemus	Т		
Great Egret	Ardea alba			S4
Least Bittern	Ixobrychus exilis			S4
Least Tern	Sterna antillarum	Т		
Limpkin	Aramus guarauna	SSC		S 3
Little Blue Heron	Egretta caerulea	SSC		S4
Loggerhead Shrike	Lanius ludovicianus		C2	
Merlin	Falco columbarius			SU
Osprey	Pandion haliaetus	SSC		S3S4
Roseate Spoonbill	Ajaia ajaja	SSC		S2S3
Snowy Egret	Egretta thula	SSC		S4
Swallow-tailed Kite	Elanoides forficatus			S2S3
Tricolored Heron	Egretta tricolor	SSC		S4
White Ibis	Eudocimus albus	SSC		S4
Wood Stork	Mycteria americana	E	Т	S2
Yellow-crowned Night-Heron	Nyctanassa violacea			S3?
Yellow-throated Warbler	Dendroica dominica stoddardi		C2	S2S3

ADDENDUM E – Fire Management Plan

Canaveral Marshes Conservation Area

Fire Management Plan

The District Fire Management Plan provides general fire management information relative to policy, procedure, and reporting. This document provides the guidelines for the implementation of prescribed fire activities on the Canaveral Marshes Conservation Area (CMCA).

Introduction and Objectives

The CMCA covers approximately 11,952 acres in Brevard County. The property is located approximately 25 miles east of Orlando, 2 miles west of Titusville, and 10 miles west of the Kennedy Space Center (See Figure 1). SR 50 is located along the northern boundary of the property, SR 407 and I-95 form portions of the east boundary, SR 528 bisects the property, and SR 520 is located along the southern boundary. The St. Johns River and associated floodplain marshes are located along the western boundary of the CMCA. This conservation area is located in numerous sections of Township 19 South, Range 34 East and Township 24, Ranges 34 and 35 East.

Historically, fires have played a vital role in the shaping and maintenance of many of the natural communities in Florida. As such, most vegetative communities and associated wildlife are fire adapted and in many instances fire dependant. Conversely, the exclusion of fire from an area allows for successional changes within the natural community. Fire exclusion leads to the excessive accumulation of fuel loads, which increases the risk for catastrophic wildfires. The goals for the implementation of fire management activities within the conservation area include:

- Continued implementation of growing season burns to encourage the perpetuation of native fire adapted ground cover species
- Restrict encroachment of shrubs and other woody species into the herbaceous marsh
- Mitigation of smoke management issues
- Restoration and maintenance of a mosaic of natural plant communities and ecological diversity
- Maintenance and restoration of ecotonal areas

The achievement of these goals requires that the conservation area be partitioned into manageable burn units prior to the application of prescribed fire within those units. The following sections summarize the considerations necessary for the safe and effective use of prescribed fire as a land management tool within the CMCA.



Fire Return Interval

The general frequency to which fire returns to a community type under natural conditions is termed its fire return interval. Some communities require frequent pyric disturbances to perpetuate themselves while others are not fire adapted and subsequently do not require fire to maintain their characteristics. Table 1 and the following discussion of native plant communities occurring on the conservation area and optimal fire return intervals was characterized in part using information from the Florida Natural Areas Inventory's *Guide to the Natural Communities of Florida*.

Table 1.

Community Type	Fire Return Interval*
Floodplain Marsh	3 years.
Hydric Hammock	Infrequent
Mesic Flatwoods	2-4years.
Depression Marsh	This community burns with adjacent communities
Prairie Hammock	Occasionally
Basin Marsh	3 years
Pasture	1-3 years or in conjunction with adjacent communities

*Stated FNAI fire return intervals are based on regional differences in communities and fuel loading. The District will target the lowest interval possible that will effectively carry fire.

The above referenced fire return intervals relate to high quality natural communities. The fire return interval within degraded systems is variable. Prescribed fire will be applied as necessary to achieve management, enhancement, and restoration goals.

Floodplain marsh is the most prevalent fire adapted natural community found within the CMCA. The floodplain marshes within the conservation area vary in level of disturbance. Disturbances including the prolonged fire exclusion in some areas have caused some areas to be dominated by a dense coverage of Carolina willow (in wetter areas), wax myrtle, and saltbush. Additionally, a heavy coverage of Brazilian pepper exist in portions of the marsh, particularly along roads, canal banks, and in hammock areas. In these areas, restoration driven management techniques may include mechanical and/or herbicide treatments as well as prescribed burning. The majority of the floodplain marsh is dominated by fire adapted plant species such as sand cordgrass and as such will have an average fire return interval of 3 years.

A small are of mesic flatwoods natural are found within the CMCA. In most areas of flatwoods, the shrub layer will be the primary carrier of fire. These areas will burn on average every 2-4 years.

The pasture areas are dominated by a suite of exotic turf grasses including Bermuda and bahia grass with varying levels of occurrence of shrubs and other woody species. These areas were cleared prior to public acquisition and utilized primarily in cattle grazing activities. Many of these areas are included in cattle leases and are actively managed for grazing. These altered plant communities will burn as site conditions permit and may be burned during the implementation of controlled burns in adjacent plant communities.

Fire management within the remaining pyric plant communities (below) will be in conjunction with the associated flatwoods communities. These plant communities will burn as site conditions permit during the implementation of controlled burns in adjacent plant communities. Additionally, these areas will not be excluded from fire activities unless warranted by safety or smoke management issues.

Depression and basin marshes are fire-adapted communities. Though fire may not carry entirely across each marsh during every burn, it is an important factor in the maintenance of the edge habitats surrounding them. These marshes are embedded within the uplands across the conservation area. In general, depression and basin marsh fires are carried through the herbaceous layer. Many of these marshy areas have been disturbed by past land use and are small, but all still occupy an important niche in providing habitat for numerous species of wildlife. Fire will be applied to these marshes any time surrounding natural communities are burned.

Seasonality and Type of Fire

Historically, most fires in Florida occurred in what is commonly referred to as the "growing season." The growing season usually spans from mid March through August. Fires during the spring and early summer months generally have significant ecological benefits as most fire-adapted flora is perpetuated by fire. Mimicking lightning ignited natural fires by implementing prescribed fire during the growing season provides benefits to natural systems by controlling shrub layers and encouraging diversity in groundcover species.

Dormant season burns, conducted from mid November through the mid March, are less intense than growing season burns and are a desirable alternative when igniting fire in areas of heavy fuel accumulation or in areas of heavy pine regeneration. Additionally, dormant season burns help to reduce fuel loads resulting in fewer safety and smoke management issues. Fuel loads are moderate across the conservation area, with most areas falling behind the desired disturbance interval.

In many cases, fire management units with similar fire management needs may be burned simultaneously, either with crews igniting the areas by hand from the ground, or with the aid of

aircraft. Aerial ignition allows District staff to ignite fire management units more quickly, resulting in a faster burnout. In an area with a large mosaic of unavailable fuels, fire can be applied easily to all portions of the unit. With ground based crews this sometimes is infeasible and may pose a safety issue. Examples of an aerial burn safety plan and medical plan are provided in Exhibit 1. A medical plan will accompany the individual burn prescriptions and be onsite the day of any burn. Aerial burn safety plans will be onsite and on the ground during any aerial burn.

Wildfire Policy

In the event of a wildfire, if conditions permit, suppression strategies will utilize existing fuel breaks to contain the wildfire. These fuel breaks may include previously burned areas, existing roads, trails, and firelines, and wetlands and other water bodies. This is only possible, with the agreement of local fire rescue, FFS, District staff, and when all of the following conditions are met:

- 1) Fuels within the area have been managed
- 2) No extreme weather conditions are present or expected
- 3) There are no other wildfires that may require action
- 4) There are sufficient resources available to manage the fire to containment
- 5) The fire and the resulting smoke will not impact neighbors or smoke sensitive areas

If any of these conditions are not met, direct suppression action will be taken.

As soon as possible following a fire in which firelines are plowed, a plan for fireline rehabilitation shall be developed and implemented.

Persons discovering arson or wildfires on the conservation area should report them to the Florida Department of Agriculture and Consumer Services, Florida Forest Service (FFS), the St. Johns River Water Management District, or by dialing 911.

Post Burn Reports

Burn reports must be completed after each controlled burn or wildfire. These reports include detailed information regarding the acreage, natural communities, staff and equipment hours, and

contractor hours. The timely completion of these reports is necessary for the compilation of information relative to the entire District burn program. Additionally, these reports provide a documented account of site-specific conditions, which are helpful in the planning of future burns.

Smoke Management

A significant challenge to the implementation of any prescribed burn program is smoke management. Since 2004, District staff have conducted 14 burns totaling 11,524 acres on the CMCA. Fuel accumulation (dead and live) across the conservation area is moderate. Heavier accumulations of fuels have the potential to produce a tremendous amount of smoke as areas are burned. As surrounding areas become increasingly urbanized, this problem will increase in magnitude, as there become fewer acceptable places to maneuver a smoke column from a prescribed fire.

While the CMCA has an acceptable smoke shed in which to place a smoke column from a prescribed fire, there are smoke sensitive areas that surround the conservation area and may affect the smoke management of each burn unit. Smoke management is a limiting factor in the application of prescribed fire within the conservation area. Figure 2 illustrates smoke sensitive areas in relation to the CMCA. As development increases in the area, fire management will become more difficult. Increasing daily traffic on SR 50, SR 407, I-95, SR 528, SR 520, and other local roads will further impair the District's ability to implement prescribed burns at the appropriate fire return intervals within the conservation area. Additional smoke management considerations include the down drainage effects of the St. Johns River and other water bodies and wetlands the Space Coast Regional Airport, located to the east of the property, and the developed residential and commercial areas surrounding the property.

Due to the lack of access to the site, the difficulty of establishing perimeter fire lines, and smoke considerations around Bird Lake Marsh, the SJRWMD will not maintain the Bird Lake Marsh portion of CMCA with prescribed fire.

A smoke screening process will be completed with each prescription, before an authorization is obtained from the FFS. A fire weather forecast is obtained and evaluated for suitable burning conditions and smoke management objectives. A wind direction is chosen that will transport smoke away from urbanized areas and/or impact these smoke sensitive areas in the least possible way. When possible, the smoke plume from burns should be directed back through the conservation area. Smoke can then mix and loft into the atmosphere over uninhabited or rural land adequately enough to minimize off-site impacts.

On burn day, the ability of smoke to mix and disperse into the atmosphere should be good. Dispersion indices should be above 35. Dispersions of greater than 69 will only be selected if other weather and/or site conditions mitigate the potential for extreme fire behavior. Forecast mixing heights should be above 1700 ft. Transport winds should be at least 9 mph to effectively minimize residual smoke. Lower transport wind speeds can be utilized if dispersion index and mixing heights are above average. Burns will be conducted with a carefully plotted wind direction to limit and/or eliminate negative impacts from smoke to neighbors and urbanized areas.



Mechanical Treatments

Short and long-term weather conditions and urban interface issues are important considerations when implementing a prescribed fire program. Weather conditions such as extended droughts or insurmountable smoke management issues due to increased urbanization may require the District to manage natural systems alternately. A variety of methods including mowing, roller chopping, and herbicide applications may be incorporated as alternatives to prescribed fire.

Prescribed fire activities are planned for the conservation area over the next ten years and will be conducted in conjunction with annual burn plans.

Legal Considerations

Only burn managers certified by FFS will approve the unit prescriptions and must be on site while the burn is being conducted. Certified burn managers adhering to the requirements of F.S. 590.026 are protected from liability for damage or injury caused by fire or resulting smoke, unless gross negligence is proven.

Fire Management Units

Fire management units (FMUs) have been delineated on the conservation area. Where logical, the District used (or will use) existing roads and trails, and natural breaks such as wetlands and water bodies to delineate fire management units. Occasionally, multiple fire management units with similar fire needs will be burned simultaneously and these delineations provide a break in fuels so that staff may burn smaller areas than initially planned if needed.

Ideally, District staff would thoroughly address and describe each fire management unit in terms of its fire management needs. Though all units within the bounds of the conservation area are somewhat different, all can be categorized into one of several fuel model (FM) descriptions. The thirteen standard fuel models (as described in Hal E. Anderson's *Aids to Determining Fuel Models For Estimating Fire Behavior*) were used as a basis for this categorization. The factors considered in determining each FM are amount, composition and arrangement of available fuels within units, predicted fire behavior within each unit (under conditions acceptable to implement a prescribed burn), and resources necessary to regain management of a fire in extenuating circumstances. District staff anticipates the change of vegetative assemblages over time due to growth and/or restoration and understand that fuel characteristics, models, and resulting fire behavior will also change.

Below is a brief description of each fuel model occurring within the FMUs currently delineated and the associated natural communities. A detailed description of each individual fire management unit and its associated objectives will be included in the individual prescriptions. Some fire management units within the conservation area contain multiple FMs. In these instances, the designated FM is dominant in coverage. Figure 3 illustrates the FM associated with individual fire management units.


Fuel Models

Fuel Model 3

This category includes fire management units that are best described as floodplain marsh, dominated by sand cordgrass. Fire in these fuel types is spread through the tall grasses at a high rate of spread. Wind may drive fire in these fuels to the upper ends of the grass and across open water. The optimal fire return interval in these areas is every 3 years.

Fuel Model 7

This category includes fire management units that are best described as mesic and wet flatwoods. Fire in these fuel types is spread through both the shrub and herbaceous layers. The shrub layer components present within the fire management units of this FM on the conservation area include saw palmetto, gallberry and other ericaceous shrubs between 3 and 5 feet tall and are contiguous across most of the units. The herbaceous layer includes wiregrass. Desired fire return interval is every 2-4 years.

Exhibit 1

Aerial Burn Safety Plan

Canaveral Marshes Conservation Area

The hazards associated with this type of burning are related to working with the helicopter, the sphere dispenser, and dealing with active fire. All helicopter safety procedures and all district fireline policies and procedures will be followed.

1. BRIEFING - During the operational briefing, the safety plan will be reviewed with all personnel on the burn.

2. HELICOPTER SAFETY - The pilot will give a helicopter safety briefing at the morning operational briefing.

3. IGNITION MACHINE SAFETY – The operator will review the operation and cleaning procedures for the dispenser at the morning briefing.

4. PERSONAL PROTECTIVE EQUIPMENT – The incident commander will ensure that all personnel have the required PPE.

5. HIGH HAZARD AREAS – All high hazard areas such as power lines shall be designated on the map and attached to the burn plan.

6. EMERGENCY LANDING ZONES – These should be confirmed with the pilot and indicated on the burn map.

Helispot Latitude _____"N

Longitude _____"W

Crash Rescue Plan

In the event of an accident involving the helicopter the following procedures will be followed.

INCIDENT COMMANDER or BURN BOSS

- 1. Notify 911
- 2. Notify Brevard County Fire Rescue 321-633-2056
- 3. Notify Brevard County Sheriff's Office 321-952-6371
- 4. Notify Osceola County Fire Rescue 407-742-7000
- 5. Notify Osceola County Sheriff's Office 407-348-1100
- 6. Assume responsibility of the Rescue Operation.
- 7. Notify NTSB 305-957-4610 or 404-462-1666
- 8. Delegate responsibility of fire control to the second in command or the most qualified.

SECOND IN COMMAND

- 1. Assume responsibility of the burn.
- 2. Assist the IC or Burn Boss with resource and personnel needs for the rescue operation.

3. If the IC is in the helicopter, second in command will assume rescue operation responsibilities and assign the most qualified to fire control.

LEVEL 1 TRAUMA CENTER

- 1. Holmes Regional-Rockledge 321-434-1913
- 2. Orlando Regional 321-841-5210

DIVISION OF FORESTRY

1. Orlando Dispatch 407-892-2963

NATIONAL TRANSPORTATION SAFETY BOARD

- 1. Southeast Regional Office 305-957-4610
- 2. Southeast Field Office 404-462-1666

ADDENDUM F – BREVARD COUNTY LETTER OF COMPLIANCE

ADDENDUM G – ACQUISITION INFORMATION

Following is a brief overview of the nine acquisitions that comprise Canaveral Marshes Conservation Area.

<u>Transfer Lands (4,551 acres)</u> – There are 45 Warranty Deeds and 3 Petition for Condemnations that comprise this acquisition from the Central and Southern Flood Control District in 1977. All are full fee SJRWMD.

<u>Canaveral Industrial Park (2,349 acres)</u> - In 1986, the SJRWMD and the Board of Trustees of the Internal Improvement Trust Fund jointly purchased (50/50% undivided interest) the Canaveral Industrial Park. There is a Quit Claim, Warranty, and Fee Simple Deed for this acquisition.

<u>Fisch (3,544 acres)</u> - In 1990, the SJRWMD purchased the Fisch property that included a 106acre donation for off-site mitigation. There is a Special Warranty and a Quit Claim Deed for this SJRWMD full fee acquisition.

Eckerd/Swann Bird Lake Donation/Mitigation Parcels: In December 1990, 656 acre and 87 acre parcels were donated as mitigation for an off-site project.

Starting in 2000 and ending in 2009, the Great Outdoors donated five parcels totaling approximately 1,075 acres to the SJRWMD as mitigation.

ADDENDUM H – PUBLIC HEARING NOTICE

Page 1 of 1

Notice of Meeting/Workshop Hearing

WATER MANAGEMENT DISTRICTS

St. Johns River Water Management District

The St. Johns River Water Management District announces a public meeting to which all persons are invited. DATE AND TIME: Wednesday, February 18, 2015, 7:00 pm - 8:00 pm; Canaveral Marshes Conservation Area Land Management Plan Public Meeting.

PLACE: St. Johns River Water Management District's Blue Cypress Room, 525 Community College Parkway SE, Palm Bay, FL 32909.

GENERAL SUBJECT MATTER TO BE CONSIDERED: This public meeting will include a short presentation of the draft land management plan for Canaveral Marshes Conservation Area, followed by public comments. A copy of the agenda may be obtained by contacting: J. B. Miller, 386-329-4381 ©, or jbmiller@sjrwmd.com. A draft copy of the management plan can be found at http://www.floridawater.com/landmanagementplans. Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 7 days before the workshop/meeting by contacting: J. B. Miller, 386-329-4381 © or jbmiller@sjrwmd.com. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice). If any person decides to appeal any decision made by the Board with respect to any matter considered at this meeting or hearing, he/she will need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence from which the appeal is to be issued.

https://www.flrules.org/gateway/readFile.asp?sid=6&tid=15591312&type=1&file=40C.htm 1/26/2015

<u>ADDENDUM I – MANAGEMENT PROCEDURES OF</u> <u>ARCHAEOLOGICAL AND HISTORICAL SITES ON STATE-OWNED OR</u> <u>CONTROLLED LANDS</u>

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties (revised March 2013)

2

These procedures apply to state agencies, local governments, and non-profits that manage stateowned properties.

A. General Discussion

Historic resources are both archaeological sites and historic structures. Per Chapter 267, Florida Statutes, 'Historic property' or 'historic resource' means any prehistoric district, site, building, object, or other real or personal property of historical, architectural, or archaeological value, and folklife resources. These properties or resources may include, but are not limited to, monuments, memorials, Indian habitations, ceremonial sites, abandoned settlements, sunken or abandoned ships, engineering works, treasure trove, artifacts, or other objects with intrinsic historical or archaeological value, or any part thereof, relating to the history, government, and culture of the state."

B. Agency Responsibilities

Per State Policy relative to historic properties, state agencies of the executive branch must allow the Division of Historical Resources (Division) the opportunity to comment on any undertakings, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the project, permit, grant, etc.

State agencies shall preserve the historic resources which are owned or controlled by the agency.

Regarding proposed demolition or substantial alterations of historic properties, consultation with the Division must occur, and alternatives to demolition must be considered.

State agencies must consult with Division to establish a program to location, inventory and evaluate all historic properties under ownership or controlled by the agency.

C. Statutory Authority

Statutory Authority and more in depth information can be found at:

http://www.flheritage.com/preservation/compliance/guidelines.cfm

D. Management Implementation

Even though the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual. Specific information regarding individual projects must be submitted to the Division for review and recommendations.

Managers of state lands must coordinate any land clearing or ground disturbing activities with the Division to allow for review and comment on the proposed project. Recommendations may include, but are not limited to: approval of the project as submitted, cultural resource assessment survey by a qualified professional archaeologist, modifications to the proposed project to avoid or mitigate potential adverse effects.

Projects such as additions, exterior alteration, or related new construction regarding historic structures must also be submitted to the Division of Historical Resources for review and comment by the Division's architects. Projects involving structures fifty years of age or older, must be submitted to this agency for a significance determination. In rare cases, structures under fifty years of age may be deemed historically significant. These must be evaluated on a case by case basis.

Adverse impacts to significant sites, either archaeological sites or historic buildings, must be avoided. Furthermore, managers of state property should make preparations for locating and evaluating historic resources, both archaeological sites and historic structures.

E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at: http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements .pdf .

* * *

Questions relating to the treatment of archaeological and historic resources on state lands should be directed to:

Deena S. Woodward Division of Historical Resources Bureau of Historic Preservation Compliance and Review Section R. A. Gray Building 500 South Bronough Street Tallahassee, FL 32399-0250

Phone:	(850) 245-6425
Toll Free:	(800) 847-7278
Fax:	(850) 245-6435

CANAVERAL MARSHES CONSERVATION AREA FLORIDA MASTER SITE INFORMATION

BR00014 – Possum Bluff

The Possum Bluff site is prehistoric midden approximately 1/3 acre in size. The site was visited in 2013. It is heavily vegetated. Notable plant species observed were Spanish stopper and rougeplant. According to LIDAR data, the highest elevations of the midden are approximately 1/2 meter above the surrounding marsh. The southwestern portion of the midden is located adjacent to the main channel of the St. Johns River. There is some loss of the midden to erosion. Faunal material (banded mystery snail and turtle bone) and pottery (St. Johns I & II) were observed in the eroded area. Other than the erosion, the midden is in good shape. The SJRWMD has constructed an inclement weather shelter adjacent to the site. This is a locally common site for boater and airboaters to visit.

<u>BR00549 – Trooper</u>

The Trooper site is a prehistoric midden with historical refuse on top. The site was visited in 2013. It's an approximately 1 acre midden. Heavily vegetated, including a number of sub-tropical plants such as white and Spanish stopper, white indigo berry, and rougeplant. According to LIDAR data, the highest elevations of the midden are approximately one meter above the surrounding marsh. There is evidence of some old potholing, but the midden is in good shape.

BR01778 - Addison Canal

Addison Canal was dug in 1912-13 by Titusville Fruit and Farm Lands Company to drain lands adjacent to the St. Johns River into the Indian River. 43 miles of lateral canals were created. Anastasia Formation limestone excavated from the canals was used to harden roads to their fields.

BR01846 – Isolate Canoe

A pre-historic canoe was found by local person who contacted Ft. Christmas Historical Park. DHR was contacted and said it was on sovereign submerged land so it was owned by the state. It was buried in the east bank of the river. Volunteers excavated the canoe. It is now in a fresh water pond at Ft. Christmas Historical Park. DHR staff took measurements, photographed, took wood samples, and sketched the canoe.

ADDENDUM J - 1ST AMENDMENT TO PLAN - LEASE TO USAF FOR LIGHTNING DETECTION SYSTEM



FLORIDA DEPARTMENT OF Environmental Protection

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, FL 32399 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Noah Valenstein Secretary

March 12, 2021

Mr. Brent Bachelder St. Johns River Water Management District Bureau of Land Resources P.O. Box 1429 Palatka, Florida 32178

RE: Canaveral Marshes Conservation Area Management Plan Amendment

Dear Mr. Bachelder:

The Division of State Lands, Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund, hereby approves the management plan amendment for the addition of a lease to the United States Air Force for a lightning detection system at Canaveral Marshes Conservation Area. This approval amends the August 21, 2015 management plan. That management plan is due for update by August 21, 2025. Please include these management activities in the next update.

Pursuant to s. 253.034(5)(a), F.S., each management plan is required to "describe both short-term and long-term management goals, and include measurable objectives to achieve those goals. Short-term goals shall be achievable within a 2-year planning period, and long-term goals shall be achievable within a 10-year planning period." Upon completion of short-term goals, please submit a signed letter identifying categories, goals, and results with attached methodology to the Division of State Lands, Office of Environmental Services.

Pursuant to s. 259.032(8)(g), F.S., by July 1 of each year, each governmental agency and each private entity designated to manage lands shall report to the Secretary of Environmental Protection, via the Division of State Lands, on the progress of funding, staffing, and resource management of every project for which the agency or entity is responsible.

Pursuant to s. 259.032, F.S., and Chapter 18-2.021, F.A.C., management plans for areas less than 160 acres may be handled in accordance with the negative response process. This process requires management plans and management plan amendments be submitted to the Division of State Lands for review, and the Acquisition and Restoration Council (ARC) for public notification. The Division of State Lands will approve these plans or

Mr. Brent Bachelder Page 2 March 12, 2021

plan amendments submitted for review through delegated authority unless three or more ARC members request the division place the item on a future council meeting agenda for review. To create better efficiency, improve customer service, and assist members of the ARC, the Division of State Lands will notice negative response items on Thursdays except for weeks that have State or Federal holidays that fall on Thursday or Friday. The Division of State Lands will contact you on the appropriate Friday to inform you if the item is approved via delegated authority or if it will be placed on a future ARC agenda by request of the ARC members.

Pursuant to s. 259.036(2), F.S., management areas that exceed 1,000 acres in size, shall be scheduled for a land management review at least every 5 years.

Approval of this land management plan amendment does not waive the authority or jurisdiction of any governmental entity that may have an interest in this project. Implementation of any upland activities proposed by this management plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities. Pursuant to the conditions of your lease, please forward copies of all permits to this office upon issuance.

Sincerely,

Deborah Bur Deborah Bur Date: 2021.03.17 08:29:11 -0400

Deborah Burr Office of Environmental Services Division of State Lands

Florida Department of Environmental Protection, Division of State Lands

Land Management Plan Amendment Request For Canaveral Marshes Conservation Area February 2021

REQUEST

The St. Johns River Water Management District would like to request to amend the Land Management Plan (LMP) for Canaveral Marshes Conservation Area allowing the addition of a lease to the United States Air Force (USAF) for a lightning detection system at Canaveral Marshes Conservation Area (CMCA).

BACKGROUND

The management of District-owned lands is addressed in the process of developing site-specific LMPs. Following District Governing Board – and in this case Acquisition and Restoration Council (Council) – approval, LMPs guide management activities for the next ten years. Some older plans did not fully include the potential role of agreements, leases and special use authorizations.

Chapter 373.1391 Florida Statutes authorizes and encourages the District to enter into cooperative land management agreements with state agencies or local governments to provide for the coordinated and cost-effective management of lands to which the water management districts, the Board of Trustees of the Internal Improvement Trust Fund, or local governments hold title. District Policy #90-16, promotes the District entering into agreements with other agencies and private parties for cooperation and coordination of management of the District's lands. In addition, the District is authorized to enter into Cooperative Agreements, Cooperative Management Leases, Leases, Easements and Special Use Authorizations (SUA) to protect the District's water management interests and to enhance the management and public value of the land. Leases can be a useful tool to accomplish land management objectives and will be evaluated and implemented where appropriate. Common examples include cattle grazing and apiaries, and the District remains open to considering other types of leases which help achieve management goals.

CMCA comprises approximately 11,055 acres and is located in northern Brevard County; south of S.R. 50 and north of C.R. 520 on the east side of the St. Johns River, approximately 10 miles southwest of Titusville. Within CMCA, the District and the Board of Trustees of the Internal Improvement Trust Fund have 50/50 ownership interest in the Canaveral Industrial Park parcel, totaling approximately 2,349 acres. A July 13, 2009 letter (page 3) from the Bureau of Public Land Administration to District staff indicates that a lease from the BOT to the District was not necessary for District management of this parcel. The lightning detection lease site is within the Canaveral Industrial Park parcel and includes approximately 0.5 acre of improved pasture (pages 4-5). The USAF lightning detection system lease serves Cape Canaveral Naval Air Station and the Kennedy Space Center.

The USAF lightning detection lease at CMCA commenced in 2006 as a license agreement. In February 2016, after the approval of the 2015 CMCA LMP, the lightning detection system use was converted to a five-year lease which expired January 31, 2021. Consistent with the Lease, an expiration reminder notice was sent to USAF on September 15, 2020 and on September 17, 2020, USAF emailed their desire to continue the lease. USAF is required to utilize their federal template and a five-year lease term.

The only change in the new lease (page 6) is the access route to the lightning detection system site. The District notified USAF that the access route in the current lease would change due to the District's acquisition of an access easement from the adjacent neighbor (Townsend) that could also be used as access for the lightning detection system site. USAF included the access description in their new lease. The District received USAF lease template for review on January 12, 2021.

DISCUSSION

District staff has received approval from the District Governing Board for a lightning detection lease to the USAF in the CMCA. When the CMCA LMP was last updated in 2015, this use was not specifically mentioned. At the time, the lightning detection system was being allowed as a license agreement. SUAs and license agreements are not listed in management plans – just leases and proprietary encumbrances. District Staff interprets Section 3.3 "Single or Multiple-Use Management" (see LMP excerpt attached on page 4) as including this use. At this time, District staff requests that the District Governing Board and the Council approve an amendment to the LMP specifically including this lease as consistent. District Staff are requesting an amendment to the LMP for CMCA to include the lightning detection system in the "Title Interest & Encumbrances" section that reads.

Leases can be a useful tool to accomplish land management objectives and will be evaluated and implemented where appropriate. Common examples include cattle grazing and apiaries, and the District remains open to considering other types of leases which are compatible with management of CMCA. The United States Air Force has operated a roughly 0.5-acre lightning detection system site at CMCA since 2006. In 2016, the agreement for this site was converted to a lease. The lease was renewed in 2021 for another five-year term.

Concurrent with this request, staff is working with the District Governing Board to receive Governing Board approval of this amendment. A full update to the CMCA LMP is due in 2025. The scope of the updated LMP will include language referencing leasing, as well as information on the approved lightning detection system lease.



Florida Department of Environmental Protection

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

July 13, 2009

Ms. Terri Mashour St. Johns River Water Management District 4049 Reid Street Palatka, FL 32178-1429

RE: Canaveral Industrial Park

Dear Ms. Mashour,

This letter is to inform the St. Johns River Water Management District (District) of our legal staff's position on whether or not a lease needs to be granted to the District for the management of the above mentioned property. The District and the Board of Trustees of the Internal Improvement Trust Fund (BOT) have 50/50 ownership interest in the property.

The District, as co-owner, has the right to possess the property. A lease is not required for the District to police and manage the property as long as best management practices are used.

If you have any questions about this matter, you may call me at 850.245.2720.

Sincerely,

Kime Landes Bureau of Public Land Administration Mail Station 130



Canaveral Marshes Conservation Area – Lightning Detection System Lease



Excerpt from 2015 Land Management Plan

3.3 Single or Multiple-Use Management

CMCA is managed under the multiple-use concept. The property provides numerous public outdoor recreational and educational opportunities all the while maintaining three cattle leases.

All of the current uses and activities within CMCA are considered to be in accordance with the purposes of acquisition, SJRWMD's agency mission, and the Conceptual State Lands Management Plan. During the planning process for this plan, it was determined that no additional uses and activities would be considered at this time. Lease No. USAF-AFSPC-STLB-20-1-0464

LEASE TO

DEPARTMENT OF THE AIR FORCE

FROM

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

PALATKA, FLORIDA

FOR

4D LIGHTNING

DETECTION SYSTEM

SITE, STLB

Form approved by SAF/GCN 3 Mar 15 Previous versions are obsolete

Lease No. USAF-AFSPC-STLB-1-0464

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Lease No. USAF-AFSPC-STLB-1-0464

THIS LEASE is made as of the ______ day of ______ 2021, by and between River Water Management District, a Public body, existing under Chapter 373, Florida Statutes (the "Lessor") and The United States of America, acting by its Secretary of the Air Force (the "Government" or the "Air Force"). The Lessor and the Government may sometimes be referred to jointly as the "Parties," and each separately as a "Party." The term "Lessor" includes its successors and assigns, if any. Lessee includes its assigns, if any.

The Government is entering into the Lease under the authority contained in 10 U.S.C. § 2663.

WHEREAS, the Lessor and the Air Force have entered into Lease, USAF-ASPC-STLB-16-1-0394, to use and occupy the Licensed Premises (defined below), which by its terms expire on 31 January 2021.

WHEREAS, this Lease continues to grant the Air Force use of Premises in accordance with the terms hereof.

NOW, THEREFORE, the Lessor, for the consideration set forth below, hereby leases to the Government the Leased Premises (identified below), for the purpose of weather surveillance, subject to the following conditions:

Leased Premises includes the real property described on **Exhibit A** and depicted on **Exhibit B** together with the right of the Government and its officers, employees, invitees, licensees, agents and contractors to use the streets, common driving areas, sidewalks, and walkways around the real property for access to and from public streets and highways (the "Leased Premises"), and certain personal property, if any, identified in **Exhibit A** (the "Personal Property"). The Personal Property is an integral part of the Leased Premises and may be used by the Government in connection with its use of the real property included in the Leased Premises.

BASIC TERMS

1. TERM

1.0. <u>Term</u>. One (1) year, beginning on 1 February 2021, (Term Beginning Date) and ending on 31 January 2022 (Term Expiration Date) and continuing from year to year thereafter, but in no event later than 31 January 2026, unless terminated as specified elsewhere in this Lease.

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2. RENT

2.1. The consideration for this lease will be at no cost to the Government other than the protection, care, and maintenance of the leased area.

3. CORRESPONDENCE

3.0. Whenever the Government or the Lessor shall desire to give or serve upon the other a notice, demand, order, direction, determination, requirement, consent or approval, request, or other communication with respect to this Lease or with respect to the Leased Premises and any improvements located thereon, each such notice, demand, order, direction, determination, requirement, consent or approval, request, or other communication shall be in writing and shall not be effective for any purpose unless same shall be given or served by personal delivery to the Party or Parties to whom such notice, demand, order, direction, determination, requirement, consent or approval, request, or other communication is directed or by mailing the same, in duplicate, to such Party or Parties through a nationally recognized and reputable overnight delivery service at the regular delivery address for the parties specified below. In the latter case, delivery shall be effective on the date confirmed by the records of such service. All correspondence that must be sent, and all notices required or desired to be given under this Lease, must be addressed, if to the Air Force, to:

Real Property Officer 45 CES/CEIAP 1224 Jupiter Street Patrick Air Force Base, Florida 32925

with a copy to:

Department of the Air Force AFCEC/CIT 2261 Hughes Ave., Ste. 155 JBSA Lackland, TX 78236-9853

and, if to the Lessor, to:

St. Johns River Water Management District Attention: Director, Real Estate Services P.O. Box 1429 Palatka, Florida 32178-1429

or to another address that the Parties may from time to time otherwise direct. Notice shall be given in writing and enclosed in a sealed envelope to the address of the receiving Party, and either hand-delivered, or sent by United States Postal Service, or by recognized overnight courier. The communication will be deemed delivered when received by the addressee.

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4. ACCESS AND INSPECTION

4.0. Lessor shall have the right to access the Leased Premises for purposes of inspection at any reasonable time with reasonable prior notice to the Government.

5. DEFAULT AND TERMINATION

5.1. The failure of the Lessor or the Government to comply with any provision of this Lease, where such failure to comply continues for thirty (30) days after delivery of written notice, shall constitute a default or breach of this Lease. If, however, the time required to return to compliance exceeds the thirty (30) day period, the defaulting Party shall not be deemed to be in default if within such period the actions necessary to bring the Lease into compliance have begun and are diligently and continuously pursued to until the default has been cured.

5.1.1. In the event of any default and breach of this Lease, the non-defaulting Party may terminate this Lease at any time after expiration of the cure period provided for in Condition 5.1 upon written notice of the termination. The termination notice shall be effective as of a date to be specified in the notice, which shall be at least seven (7) but not more than thirty (30) days after receipt of the notice.

5.2. The Government may terminate this Lease at any time by giving the Lessor at least thirty (30) days' prior written notice.

5.3. The Government shall vacate and surrender the Leased Premises to the Lessor on or before the date of expiration of the Lease, or its earlier termination. The Government will remove all of its property from the Leased Premises and restore them to as good order and condition, reasonable wear and tear and damage beyond the control of the Government excepted, as that existing on the Term Beginning Date, subject to Condition 7 below. In the alternative and at the Government's discretion, the Government may convey any remaining improvements to lessor and/or compensate the Lessor for the diminution in value of the Premises in lieu of removal and/or restoration.

OPERATION OF THE PREMISES

6. CONDITION OF LEASED PREMISES

6.0. Prior to the Term Beginning Date, an Environmental Baseline Survey (EBS) Waiver for the Leased Premises dated 11 January 2021 has been delivered to the Lessor and is attached as **Exhibit C** hereto. The EBS waiver sets forth those environmental conditions and matters on and affecting the Leased Premises on the Lease Effective Date as determined from the records and analyses reflected therein. Any failure on the part of the Lessor to fully disclose any known latent defect on the Leased Premises shall be grounds for termination of this Lease by the Government. A separate EBS waiver for the Leased Premises shall be prepared by the Government, after the expiration or earlier termination of this Lease "Final EBS" or "EBS waiver". Such Final EBS or EBS waiver shall document the environmental conditions and matters on and affecting the Leased Premises on the

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Term Expiration Date as determined from the records and analyses reflected therein. The Final EBS or EBS waiver will be used by the Government to determine any obligations to maintain and restore the Leased Premises under this Lease.

7. CONSTRUCTION AND ALTERATIONS

7.0. The Government may place, construct, or make substantial improvements, structures, alterations, or additions to, or installations upon, and otherwise modify or alter the Leased Premises ("Alterations") with the prior written consent of the Lessor. Unless otherwise agreed in writing, all Alterations shall remain the property of the Government when annexed to the Leased Premises.

8. MAINTENANCE OF LEASED PREMISES

8.0. The Government shall keep the Leased Premises in good order and repair during the term of this Lease.

9. UTILITIES AND SERVICES

9.0. The Government shall be responsible for all utilities, janitorial services, building maintenance, and grounds maintenance for the Leased Premises.

10. USE OF LEASED PREMISES

10.0. <u>Use</u>. Land used for the purpose of operating and maintaining a 4D Lightning Detection System (ALDF) to support the weather forecast functions of the 45th Space Wing, subject, however, to all applicable provisions of this Lease. The Government may use the Leased Premises for any use not otherwise prohibited by this Lease.

ENVIRONMENT

11. ENVIRONMENTAL PROTECTION

11.1. <u>Compliance with Law</u>. The Government shall comply, at its sole cost and expense, with the Federal, state, and local laws, regulations, and standards that are or may become applicable to its activities on the Leased Premises, including, without limitation, obtaining any environmental permits required for its operations under this Lease. The Government, however, shall not be responsible for any act or omission of the Lessor that contaminates the Leased Premises, and the Lessor agrees to comply with all applicable environmental laws and regulations as a result of any such act or omission, and to the extent permitted by law, the Lessor agrees to hold the Government harmless from, and indemnify and defend the Government against, any action arising from contamination on, and migrating upon, the Leased Premises by the Lessor.

11.2. <u>Wetlands.</u> The Government shall protect any wetlands found or identified on the Leased Premises from destruction, loss, or degradation, consistent with the requirements of applicable law.

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12. HISTORIC PROPERTY

12.0. The Government will comply with all laws applicable to historical property located on the Leased Premises, if any.

CHANGES IN OWNERSHIP OR CONTROL

13. ASSIGNMENTS, SUBLEASES, AND LICENSES

13.1. The Government may not assign this Lease or sublet the Leased Premises for any purpose not provided in this agreement without the prior written consent of the Lessor, which shall not be unreasonably withheld, delayed, or qualified.

13.1.1. Any assignment or sublease granted by the Government shall be consistent with all of the terms and Conditions of this Lease and shall terminate immediately upon the expiration or any earlier termination of this Lease. Under any assignment made, with or without consent, the assignee shall be deemed to have assumed all of the obligations of the Government under this Lease.

13.1.2. The Government shall deliver to the Lessor, for its prior written consent, a copy of each agreement of sublease or assignment it proposes to execute. Consent or rejection by the Lessor shall be given within ten (10) business days of receipt of the proposed agreement.

13.1.3. Any agreement of sublease or assignment must expressly provide that: (a) the sublease or assignment, as the case may be, is subject to all of the terms and Conditions of the Lease; (b) the sublease shall terminate on the expiration or earlier termination of this Lease; (c) the sublessee or assignee, as the case may be, shall assume all of the obligations of the Government; and (d) in case of any conflict between any provisions of this Lease and any provisions of the agreement of sublease or assignment, this Lease will control. A copy of this Lease must be attached to the agreement of sublease or assignment.

13.2. The Lessor shall not engage in any financing or other transactions creating any mortgage lien upon the Leased Premises; place or suffer to be placed upon the Leased Premises any other lien or other encumbrances; or suffer any levy or attachment to be made on the Lessee's interest in the Leased Premises. Any mortgage, encumbrance, or lien shall be deemed to be a violation of this condition and constitute a failure to comply with the terms of this Lease on the date of its execution or filing of record regardless of whether or when it is foreclosed or otherwise enforced.

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14. EASEMENTS AND RIGHTS OF WAY

14.1. This Lease is subject to all existing easements, rights-of-way, and rights in the nature of an easement or right-of-way (collectively "Outgrants") related to the Leased Premises.

14.2. The Lessor has identified all Outgrants in the attached Exhibit D.

14.3. The holders of such Outgrants shall have reasonable rights of ingress and egress over the Leased Premises in order to carry out the purpose of the Outgrants.

GENERAL PROVISIONS

15. HEADINGS OR TITLES

15.0. The brief headings or titles preceding each condition are merely for purposes of identification, convenience, and ease of reference, and will be completely disregarded in the construction of this Lease.

16. COUNTERPARTS

16.0. This Lease is executed in two (2) counterparts each of which is deemed an original of equal dignity with the other, and which is deemed one and the same instrument as the other.

17. ENTIRE AGREEMENT

17.0. It is expressly agreed that this written instrument embodies the entire agreement between the Parties regarding the use of the Leased Premises by the Government, and there are no understandings or agreements, verbal or otherwise, between the Parties except as expressly set forth in this Lease. This instrument may only be modified or amended by mutual agreement of the Parties in one writing signed by each Party.

18. TIME OF THE ESSENCE

18.0. Time shall be of the essence with this Lease.

19. TAXES

19.0. The Lessor shall pay to the proper authority, when and as the same become due and payable, all taxes, assessments, and similar charges that, at any time during the term of this Lease, may be imposed upon the Lessor with respect to the Leased Premises.20. GENERAL INDEMNIFICATION BY LESSEE

20.0. The Government cannot indemnify the Lessor for any purpose.

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Land Management Plan Amendment Request Canaveral Marshes Conservation Area

21. INSURANCE

21.0. The Government is self-insured.

22. DISPUTES

22.0. The Parties shall at all times try to resolve disputes in an amicable manner. However, the Parties reserve all rights afforded them under law to resolve any such dispute by any lawful means.

23. AMENDMENTS

23.0. This Lease may be amended at any time by mutual agreement of the Parties in one writing and signed by a duly authorized representative of each Party.

24. REPORT TO CONGRESS

24.0. This Lease is not reportable under 10 U.S.C. § 2662.

25. DAMAGE TO GOVERNMENT PROPERTY

25.0. The Lessor shall not be responsible for damage to government property pursuant to any grants provided under this agreement, except those of gross negligence or willful misconduct on the part of Lessor, Lessor's agents, and Lessor's assigns.

26. COMPLIANCE WITH APPLICABLE LAWS

26.0. The Government will comply with all applicable laws in its use and occupancy of the Leased Premises. Nothing in this Lease shall be construed to constitute a waiver of Federal Supremacy or Federal sovereign immunity.

27. RESTRICTIONS ON USE OF LEASED PREMISES

27.0. RESERVED

28. EXHIBITS

28.0. Five (5) exhibits are attached to and made a part of this Lease, as follows:

Exhibit A - Description of Leased Premises

Exhibit B – Map of the Leased Premises

Exhibit C – Environmental Baseline Survey (EBS) Waiver

Exhibit D – List of Outgrants

Exhibit E – Physical Condition Report (PCR) Photos

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Lease No. USAF-AFSPC-STLB-1-0464

IN WITNESS WHEREOF, the Parties have caused this Lease to be executed by their duly authorized representatives on the dates shown below.

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

ANN B. SHORTELLE, Ph.D **Executive Director**

1 28/2021 Date:

ATTEST:

Mary Ellen Winkler --Deputy General Counsel, SJRWMD

Approved as to form and legality; For use and reliance only by SJRWMD

Karen Uty

Karen Ferguson, Asst. General Counsel Office of General Counsel

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Lease No. USAF-AFSPC-STLB-1-0464

THIS AGREEMENT is also executed by the Government under the authority of the Secretary of the Air Force this _____ day of _____, 2020.

THE UNITED STATES OF AMERICA by the Secretary of the Air Force

JAMES E. FITZPATRICK, PE., GS-15, DAF Acting Director, Installations Directorate

Signed, sealed, and delivered In the presence of:

Witness

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EXHIBIT A— DESCRIPTION OF PREMISES

The Leased Premises consists of an irregular shaped area containing approximately one-half acre of land within an 800 acre parcel identified as parcel 24-35-07-00-00001.0-0000.00 owned by St. Johns River Water Management District, located within Brevard County, Florida. The Leased Premise is located approximately midway along the eastern border of the parcel. More precisely, its right front corner is at N 1482446.3 / E 703066.7, left front corner is at N 1482410.0 / E703071.9, back left corner is at N 1482403.8 / E 703026.7 and finally it's back right corner is at N 1482440.3 / E 703021.6.

DIRECTION TO PREMISES

Direct route to premises - Dirt and gravel roads for approximately 3.6 miles

From 520 take Satellite Blvd. 3.18 miles North to Cherven Ave.

At Cherven Ave. turn left (West) and proceed for 0.40 miles. Stop.

Site towers will be in view, at approximately 25° and 200 Yards while facing due west.

Entry gate is to the right (Northside). Proceed to the site.

OR

Mostly paved route. Dirt road for approximately 1.6 miles

From I-95 take exit 202 onto SR 524

Proceed west on SR 524 for approximately 1.2 miles until you reach Adamson Rd.

At Adamson Rd. make a right turn and proceed north for 2.8 miles until you reach Coconut Ave.

At Coconut Ave make a left turn and proceed west for .3 miles until you reach Pine St.

At Pine St. make a right turn and proceed north for .48 miles until you reach Palmetto Ave.

At Palmetto Ave make a left turn and proceed west for .7 miles until the road curves right

At that point Palmetto will transition into Cherven Ave.

After the transition proceed .85 miles on Cherven Ave. Stop

Site towers will be in view, at approximately 25° and 200 Yards while facing due west.

Entry gate is to the right (Northside). Proceed to the site.

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EXHIBIT B— MAP OF PREMISES

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Lease No. USAF-AFSPC-STLB-1-0464



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EXHIBIT C- ENVIRONMENTAL BASELINE SURVEY (EBS) WAIVER

The EBS Waiver dated 11 January 2021 is hereby incorporated by this reference.



DEPARTMENT OF THE AIR FORCE UNITED STATES SPACE FORCE 45TH SPACE WING

11-Jan-21

MEMORANDUM FOR 45 CES/CC

FROM: 45 CES/CEI

SUBJECT: Statement of Waiver for Environmental Baseline Survey (EBS) in Support of Lease Renewal with St Johns River Water Management District (SJRWMD), for Weather Instrumentation Located in Brevard County, Florida

 The 45th Space Wing plans to renew a lease for land located off Satellite Boulevard in Brevard County, Florida. This lease renewal will permit the Air Force to continue to maintain and operate 4D lightning instrumentation used to collect real time weather data needed for preparing launch forecasts.

An EBS waiver was granted for the original lease. In consideration of interviews, records search, and an onsite inspection, the EBS waiver concluded that the site was free of hazardous materials and that no release or disposal of hazardous substances or petroleum products or derivatives had occurred on the property.

3. The 45th Civil Engineer Squadron, Installation Management Flight, has performed environmental due diligence (reference the attachment) and notes that the condition of the property will not create health or safety risks. Renewal of the lease will not necessitate additional construction activities, site modifications, changes in land use, or alterations to the physical condition of the property. The continued use of the site will not introduce any new hazardous materials or petroleum products on the property.

4. Air Force Instruction (AFI) 32-7066, Environmental Baseline Surveys in Real Estate Transactions, paragraph 1.5.2, provides for a waiver to the EBS requirement if the subject real estate is free of potential sources of contamination, as determined by an initial records review, interviews, site inspection, and when the following criteria are met:

a. The condition of the property will not create unacceptable human health and safety risks from usage of the property allowed under the real property transaction documents.

b. The allowable use of the property will not introduce any hazardous substances or petroleum products in quantities greater than the minimum levels.

c. The allowable use of the property is consistent with environmental compliance requirements (such as those pertaining to wetlands, historic preservation, etc.).

5. The point of contact for this matter is Ms. Taylor Janise. She may be reached at (321) 853-6638, or e-mail taylor.janise.1@usspacecom.mil.

GINIEWSKI.PATRI CK.SCOTT.122910 3012 CKSCOTT.122910 CKSCOTT.122910 CKSCOTT.11111218-0500

PATRICK S. GINIEWSKI, GS-14 Chief, Installation Management

Attachment: 45 CES/CEIE, Environmental Due Diligence Memo, 18 Dec 20

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1st Ind, 45 CES/CC, 11 Jan 21, Statement of Waiver for Environmental Baseline Survey (EBS) in Support of Lease Renewal with St Johns River Water Management District (SJRWMD), for Weather Instrumentation Located in Brevard County, Florida

45 CES/CC

MEMORANDUM FOR 45 CES/CEI

This EBS waiver has been declared legally sufficient by the 45 SW/JA per requirements outlined in AFI 32-7066. In review of the enclosed documentation, the 45 AMDS/SGPB and 45 SW/SEAT units have concluded that renewing this will not create or exhibit a health or safety risk.

CONNELL JOSHU Detroit by A.D. 1081080867

JOSHUA D. CONNELL, Lt Col, USAF Commander

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ENVIRONMENTAL DUE DILIGENCE REPORT IN SUPPORT OF REAL PROPERTY AGREEMENT WITH ST JOHNS RIVER WATER MANAGEMENT DISTRICT FOR THE 4DLS WEATHER INSTRUMENTATION SITE SATELITTE BLVD, BREVARD COUNTY, FL

10 December 2020

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Lease No. USAF-AFSPC-STLB-1-0464

Report Documentation Page					Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.							
1. REPORT DATE		2. REPORT TYPE		3. DATES COVE	RED		
24 Sept 19		Environmental Du	e Diligence	-			
4. TITLE AND SUBTITLE					5a. CONTRACT NUMBER		
Environmental Due Diligence Report In Support Of Real Property					5b. GRANT NUMBER		
Agreement With ST Johns River Water Management District for the 4DLS Weather Instrumentation Site Satellite Blvd, Brevard County, FL					Sc. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)					5d. PROJECT NUMBER		
Wm. Mark Jennings, GS-12			50. TASK NUMBER				
45 CES/CEIE NEPA Program Specialist					Sf. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 45 SW CES/CEIE 1224 Jupiter Street, PAFB, FL, 32925				8. PERFORMING ORGANIZATION REPORT NUMBER CEI20092			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)					10. SPONSOR/MONITOR'S ACRONYM(S)		
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited							
13. SUPPLEMENTARY NOTES The original document contains color images.							
14. ABSTRACT							
15. SUBJECT TERMS							
16. SECURITY CLASSIFICATION OF: 17. LIMITATION OF					19a. NAME OF		
. REPORT unclassified	6. ABSTRACT unclassified	e. THIS PAOR unclassified	UU	8	RESPONSIBLE PERSON		

Standard Form 298 (Rev. 8-98) Praceled by ANSI 3td 229-18



Location Map



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Photographs from 24 SEP 20 Inspection (continued)

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Photographs from 24 SEP 20 Inspection (continued)

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Photographs from 24 SEP 20 Inspection (continued)

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Investigation and Interviews:

Mr. John Langett (45 AFCEC/CZOE Installation Restoration Program), Ms. Lynda Dawe (45 CES/CEIE) and Mr. Donald Gisi (RGNext) were interviewed during December 2020. These interviews did not reveal any environmental issues associated with this site. Mr. Wm. Mark Jennings (45 CES/CEIE), Ms. Taylor Janise (45 CES/CEIE) and Mr. Paul Reith (45 CES/CEIA) performed a site visit in 24 September 2020. The inspection confirmed that there were no processes, activities or materials at the site that could potentially result in contamination.

Certification of the Environmental Due Diligence Report:

The 45 CES/CEIE has conducted this Environmental Due Diligence Report on behalf of the Air Force. Mr. Wm. Mark Jennings has reviewed all appropriate records made available, and conducted visual site inspections of the selected facilities following an analysis of information during the record search. The information contained within the survey report is based on records made available and, to the best of the 45 CES/CEIE knowledge, is correct and current as of 18 December 2020. As such, the proposed Real Property transaction is in compliance with 40 CFR 761.

Certified By:	JENNINGS. WILLIAM Digitally signed by JENNINGS. WILLIAM MARK. 1204 MARK. 1204944039 Date: 2020.12.18 14:49:56-05'00'	18 December 2020
-	Wm. Mark Jennings, GS-11	Date
	NEPA Program Specialist	
Approved By:	GINIEWSKI.PATRIC K.SCOTT.122910301 2 Patrick S. Geniewski, GS-14 Chief, Installation Management Flight	6 January 2021 Date

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Exhibit D—List of Outgrants

None.

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Exhibit E—Physical Condition Report Photos

Photos taken on 24 September 2020



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24 September 2020 PDR

END

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St. Johns River Water Management District

GOVERNING BOARD MEETING

MINUTES March 9, 2021 SJRWMD District Headquarters 4049 Reid Street Palatka, FL 32177

Call to Order

Governing Board Chairman Douglas Burnett called the Governing Board meeting to order at 9:32 a.m.

The first item taken up was an Attorney/Client Session in connection with the case named Rooney v. The St. Johns River Water Management District, which began at 9:37 a.m. and was closed to the public. After conclusion of the Attorney/Client session, the Governing Board meeting was reconvened at 10:19 a.m. Chairman Burnett led the pledge of allegiance.

The agenda items were called in the following order: 1 (Recess – Executive Session), 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 24, 25, and 26. For ease of reference, each item is listed below in numerical order.

Attendance

Present: Douglas Burnett (Chairman) Rob Bradley (Vice Chairman) Susan Dolan (Secretary) Doug Bournique Janet Price Chris Peterson Cole Oliver

Via Conference Call: Ron Howse (Treasurer)

Governing Board Meeting

<u>Agenda Item 1</u>. Consideration: Executive session/attorney-client meeting relating to pending litigation in Daniel & Cassa Rooney v. St. Johns River Water Management District. This session will be in Room 162 and is not public pursuant to section 286.011(8), Florida Statutes (2020).

Attorney/Client Session closed.

Agenda Item 2. For Information: Employee Service Awards.

5-YEAR SERVICE AWARDS

R. Dave Dickens Office Director Office of Transportation, Facilities, and Safety Services

Nigel J. Greig Senior Design Technician Bureau of District Projects and Construction

Heather K. Middleton *Records Manager* Office of Business and Administrative Services

10-YEAR SERVICE AWARDS

David C. McInnes Environmental Resource Coordinator Bureau of Water Supply Planning

20-YEAR SERVICE AWARDS

Jo Ann F. Fuqua-Thornton Senior Business Support Specialist Office of Business and Administrative Services

RETIREMENTS

Carol T. Miller Senior Procurement Specialist Office of Financial Services

Agenda Item 3. For Information: The Hydrologic Conditions Report.

Erich Marzolf, Director, Division of Water and Land Resources, gave a PowerPoint presentation describing the hydrologic conditions for February 2021. A copy of the presentation has been made a permanent part of the record.

<u>Agenda Item 4</u>. Consideration: Approval of Governing Board items recommended on the Consent Agenda for approval.

Items Recommended for approval on Consent Agenda by Chairman Douglas Burnett

Items 12 through 23 were recommended for approval on the Consent Agenda.

A MOTION WAS MADE BY CHRIS PETERSON TO APPROVE THOSE ITEMS RECOMMENDED FOR APPROVAL ON THE CONSENT AGENDA, SECONDED BY RON HOWSE. MOTION CARRIED UNANIMOUSLY.

<u>Agenda Item 5</u>. Consideration: Approval of FY 2019-2020 Comprehensive Annual Financial Report and External Audit Report and authorization to distribute in accordance with legal requirements.

Vicki Kroger, Director, Office of Financial Services introduced James Halleran, Certified Public Accountant, James Moore. Mr. Halleran gave a PowerPoint presentation. A copy of the presentation has been made a permanent part of the record.

Chairman Burnett commended Dr. Shortelle and staff for their remarkable technical expertise.

Governing Board member Doug Bournique stated he would like staff to explore innovative ways to create new profit centers for use of District assets.

A MOTION WAS MADE BY SUSAN DOLAN TO APPROVE RECOMMENDATION, SECONDED BY JANET PRICE. MOTION CARRIED UNANIMOUSLY.

<u>Agenda Item 6</u>. Consideration: Approval of the Land Management Plan for Heart Island Conservation Area located in Volusia and Flagler Counties.

Brian Emanuel, Chief, Bureau of Land Resources, gave a PowerPoint presentation. A copy of the presentation has been made a permanent part of the record.

Dr. Shortelle expressed the importance of the plan and praised staff for a job well done.

A MOTION WAS MADE BY SUSAN DOLAN TO APPROVE RECOMMENDATION, SECONDED BY ROB BRADLEY. MOTION CARRIED UNANIMOUSLY.

<u>Agenda Item 7</u>. Consideration: Approval of cattle grazing lease in the Sand Lakes Conservation Area to Crescent TS Cattle Company.

Lisa A. Kelley, J.D., Assistant Executive Director, and Ramesh Buch, Director, Real Estate Services Program, gave a PowerPoint presentation. A copy of the presentation has been made a permanent part of the record.

A MOTION WAS MADE BY DOUG BOURNQUE TO APPROVE RECOMMENDATION, SECONDED BY SUSAN DOLAN. MOTION CARRIED UNANIMOUSLY.

<u>Agenda Item 8</u>. Consideration: Approval of Third Renewal to cattle grazing lease in the Three Forks Conservation Area to Willard Palmer.

Ramesh Buch, Director, Real Estate Services Program, gave a PowerPoint presentation. A copy of the presentation has been made a permanent part of the record.

A MOTION WAS MADE BY ROB BRADLEY TO APPROVE RECOMMENDATION, SECONDED BY COLE OLIVER. MOTION CARRIED UNANIMOUSLY.

<u>Agenda Item 9</u>. Consideration: Approval of a proclamation declaring April 2021 as Water Conservation Month.

Clay Coarsey, Chief, Bureau of Water Supply Planning, gave a PowerPoint presentation. A copy of the presentation has been made a permanent part of the record.

A MOTION WAS MADE BY SUSAN DOLAN TO APPROVE RECOMMENDATION, SECONDED BY CHRIS PETERSON. MOTION CARRIED UNANIMOUSLY.

<u>Agenda Item 10</u>. For Information: Presentation regarding Water Conservation regulatory requirements.

Rich Burklew, Chief, Bureau of Water Use Regulation, gave a PowerPoint presentation. A copy of the presentation has been made a permanent part of the record.

Governing Board member Ron Howse requested a breakdown of permitted allocation amounts versus average daily flow.

Agenda Item 11. For Information: Public Comment.

Speaker:

• James Hensley

Consent Agenda

<u>Agenda Item 12</u>. Consideration: Approval of the minutes from the February 9, 2021 Governing Board Meeting.

Approved (see agenda item #4).

<u>Agenda Item 13</u>. Consideration: Approval of Treasurer's Financial Report dated January 31, 2021. For information: Finance Committee Calendar for scheduling purposes.

Approved (see agenda item #4).

<u>Agenda Item 14</u>. Consideration: Approval and execution of a Final Order concurring with the Executive Director's issuance of Seventh Amended Emergency Orders 2020-10 and 2020-11.

Approved (see agenda item #4).

<u>Agenda Item 15</u>. Consideration: Approve a utility easement in favor of Sumter Electric Cooperative over Emeralda Marsh Conservation Area for electric service to the Diceglie property and authorize the Executive Director to execute any necessary documents.

Approved (see agenda item #4).

<u>Agenda Item 16</u>. Consideration: Approval of a no-cost contract time extension with Ardaman and Associates, Inc. for Geotechnical and Construction Engineering Services. The proposed revised completion date is September 30, 2021 (approximately six months).

Approved (see agenda item #4).

<u>Agenda Item 17</u>. Consideration: Approval of multiple contract awards to qualified Contractors for Annual Drum Chopping Services with Operator.

Approved (see agenda item #4).

<u>Agenda Item 18</u>. Consideration: Approval of a Land Management Plan Amendment allowing the addition of a lease to the United States Air Force for a lightning detection system at Canaveral Marshes Conservation Area.

Approved (see agenda item #4).

<u>Agenda Item 19</u>. Consideration: Approve and authorize the Executive Director to execute the Partial Release of the Regulatory Conservation Easement in Exchange for Substitute Mitigation regarding Bannon Lakes Boulevard in St. Johns County, Permit No. IND-109-107316-11.

Approved (see agenda item #4).

<u>Agenda Item 20</u>. Consideration: Approve and authorize the Executive Director to execute a Consent and Joinder to the Amendment to the Regulatory Conservation Easement in Exchange for Substitute Mitigation for Spoonbill-Parcel M-aka River Oaks at Aquarina, Brevard County, Permit No. 40-009-23572-3.

Approved (see agenda item #4).

<u>Agenda Item 21</u>. Consideration: Approve and authorize the Executive Director to execute the Release of Regulatory Conservation Easement in Exchange for Substitute Mitigation regarding San Marino Estates in Brevard County, Permit No. 4-009-92261-1.

Approved (see agenda item #4).

<u>Agenda Item 22</u>. Consideration: Revocation of Consumptive Use Permit 11274-8 for K & R Grove, for nonuse of water and authorization for the Executive Director to sign a Final Order Revoking Consumptive Use Permit.

Approved (see agenda item #4).

<u>Agenda Item 23</u>. Consideration: Approval of staff's recommendation that the Governing Board extend the term of the two Temporary Consumptive Use Permits (Deseret Field Crops and Deseret Agronomic Crops) to allow water use for crop production while the Taylor Creek Reservoir settlement-related activities continue.

Approved (see agenda item #4).

Other Items and Reports

Agenda Item 24. For Information: Governing Board comments.

Governing Board member Susan Dolan commented on various project delays and stressed the importance of maintaining deadlines.

Chairman Burnett recognized Dr. Shortelle for receiving the Employer Patriot Award from the Office of the Secretary of Defense, Employer Support of the Guard and Reserve.

Governing Board member Chris Peterson stated he will be participating in the Skiff Challenge which begins April 8 and that during the race participants will traverse each of the Water Management Districts within the state.

Agenda Item 25. For Information: Executive Director's report.

- March Employee of the Month Alyssa Mullins
- Stormwater Harvesting Pilot Project Kick-off, Clay County, Feb. 18
- Lake Apopka Wildlife Drive, Donations at Work
- St. Johns River Series Highlights District's Work
- Thank You from Youth Hunters
- Staff and Partners Take Advantage of Weather For Record Five Prescribed Burns

Agenda Item 26. For Information: Calendar of upcoming meetings.

<u>April 12</u>	Indian River Lagoon Tour Brevard County	
<u>April 13</u>	Governing Board Meeting Brevard County, City of Cocoa, City Hall	

Meeting adjourned at 11:56 a.m. - no conflicts declared

AGENDA REQUEST FOR GOVERNING BOARD MEETING March 9, 2021

MEMORANDUM

то:	Governing Board
THROUGH:	Ann B. Shortelle, Ph.D. Executive Director
FROM:	Brian Emanuel, Chief Bureau of Land Resources
SUBJECT:	Amendment to the Canaveral Marshes Conservation Area Land Management Plan

RECOMMENDATION

Approval of a Land Management Plan Amendment allowing the addition of a lease to the United States Air Force for a lightning detection system at Canaveral Marshes Conservation Area.

BACKGROUND

The management of District-owned lands is addressed in the process of developing site-specific land management plans (LMPs), which, following Governing Board approval, guide management activities for the next ten years. LMPs are updated and considered by the Governing Board each decade. Some older plans did not fully include the potential role of agreements, leases and special use authorizations.

Chapter 373.1391 Florida Statutes authorizes and encourages the District to enter into cooperative land management agreements with state agencies or local governments to provide for the coordinated and cost-effective management of lands to which the water management districts, the Board of Trustees of the Internal Improvement Trust Fund, or local governments hold title. District Policy #90-16, promotes the District entering into agreements with other agencies and private parties for cooperation and coordination of management of the District's lands. In addition, the District is authorized to enter into Cooperative Agreements, Cooperative Management Leases, Leases, Easements and Special Use Authorizations to protect the District's water management interests and to enhance the management and public value of the land. Leases can be a useful tool to accomplish land management objectives and will be evaluated and implemented where appropriate. Common examples include cattle grazing and apiaries, and the District remains open to considering other types of leases which help achieve management goals.

DISCUSSION

Real Estate Services has received approval for a lightning detection lease to the United States Air Force (USAF) in the Canaveral Marshes Conservation Area (CMCA). CMCA comprises approximately 11,055 acres and is located in northern Brevard County; south of S.R. 50 and north of C.R. 520 on the east side of the St. Johns River, approximately 10 miles southwest of Titusville. The proposed lightning detection lease site includes approximately 0.5 acre of improved pasture on the property (map below). The USAF lightning detection system lease serves Cape Canaveral Naval Air Station and the Kennedy Space Center. Staff are recommending an amendment to the LMP for CMCA to include the lightning detection system in the "Title Interest & Encumbrances" section that reads.

Leases can be a useful tool to accomplish land management objectives and will be evaluated and implemented where appropriate. Common examples include cattle grazing and apiaries, and the District remains open to considering other types of leases which are compatible with management of CMCA. The United States Air Force has operated a roughly 0.5 acre lightning detection system site at CMCA since 2006. In 2016, the agreement for this site was converted to a lease. The lease was renewed in 2021 for another five year term.

Concurrent with this recommendation, staff is working with the Florida Department of Environmental Protection, Division of State Lands and the Acquisition and Restoration Council (ARC) to receive ARC approval of this amendment. A full update to the CMCA LMP is due in 2025. The scope of the updated LMP will include language referencing leasing, as well as information on the approved lightning detection system lease.





Aerial Image of Leased Area

